EXPERIENTIAL BASES OF THE SENSE OF SELF

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Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Psychology in the Graduate School of Duke University

1972

ABSTRACT

(Psychology-Personality)

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This paper has dealt with the sense of self. This "sense" is taken to mean one's conviction that he is a continuous and unified being. The thesis begins with a critical review of the various ways in which theorists have dealt with the term. This is followed by a research study designed to provide empirical referents for the term "sense of self." This was undertaken because empirical referents are lacking in the psychological literature of "self." It was felt that the relative paucity of such an empirical basis is responsible for the general lack of explanatory power of the term "self."

Study of the various theories using "sense of self" as a central concept revealed three principal usages of the term. In the first, the self was viewed as based on the continuing, unifying perceptions of stable patterns of sensation and emotion--patterns which characterize one's experience of his own body. In the second usage, the maintenance of one's sense of self was based on his continuity in stable social roles and his

being treated by others as a continuing entity. The third usage in the literature for "sense of self" implied that this sense is a product of the individual's attempts at securing a stable value system. Although all three views have contributed to knowledge regarding the self, none has become established as paramount. Moreover, none has been empirically grounded. Thus, little in the way of concrete behavior has been explained by viewing the self in any of these three ways.

The design of this study was stimulated by the investigator's hypothesis that all three modes of experiencing self--as a physical body, as a social role player, and as an adherent of a value system--contribute to each person's sense of self. Further, it was thought that for a given individual, a sense of self might well be dependent on each of these three experiential modes to different degrees. Thus, it was attempted to assess a subject's sense of self in its three experiential modes, noting the relative salience of each. This assessment was carried out through the use of a questionnaire developed by the investigator. In order to provide empirical referents for the tripartite sense of self, it was necessary to demonstrate that groups of subjects holding to differing primary self-modes, as revealed by the questionnaire, would perform differentially on tasks thought to reflect essential aspects of self.

Differential performance was demonstrated on all three tasks--human figure drawing, creative story writing, and Semantic Differential response to words. On each of these tasks, subjects who were grouped

together by virtue of having the same primary self-mode tended to perform in a similar and predicted fashion, differentiating themselves from the two other self-mode groups.

On the basis of this empirical demonstration, two principal conclusions were reached. First, it was concluded that it is possible to operationalize the postulated tripartite sense of self. Secondly, such an assessment leads to increased capacity to predict with confidence one's behavior in certain relevant areas of activity. Goals for future research include a refined assessment of the different self-mode contributions to the sense of self, and a more precise definition of the nature and significance of those behaviors which can be predicted from knowledge of the self-mode structure.

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CHAPTER I

THEORETICAL CONSIDERATIONS

"Who are you?" This question makes reference to a great deal that is not well understood by psychology. The pronoun "you" implies the existence of a continuous, unified being. The question "Who?" calls upon the respondent to identify this being, to differentiate himself from others of his kind. The respondent, upon being asked who he is, commonly accepts the premises which have just been outlined. He accepts that he is a continuing entity, a person, much like other people in essential ways. Also, he feels able to differentiate himself from his fellows on the basis of continuing personal attributes.

The relevant continuities of experience which allow a questioner and a respondent to consider "Who are you?" a meaningful question are the subject of this paper. What has psychological theory had to say regarding the experiential bases of the sense of self?

Although questioner and respondent may share understandings underlying "Who are you?", their common premises are ambiguous. This ambiguity allows for a multiplicity of "correct" answers. For instance, both agree that the "person" they are considering is a continuous

phenomenon. There is no agreement, however, as to exactly what is continuous. There is no commonly agreed-upon set of relevant experiential continuities necessary to the definition of a person, or self. The choice of dimensions for self-description is left to the respondent. He, in answering "Who are you?", names those continuities of his experience which are essential to his recognition of himself. The diversity of continuities deemed vital by various individuals ranges from continuities of bodily awareness ("I am a tired, sickly man"), through those of social role ("I am Bill's brother"), to those of the life of values ("I am a believer in Christ").

Many unanswered questions arise concerning the sense of self. What is the range of continuities employed by individuals in defining themselves? Do individuals confine their self-definitions to one or several essential continuities? What are the factors leading one or another person to define himself using one or another set of dimensions? How is one to understand the relationships among various dimensions of self-definition, such as bodily awareness, social role, and the valuing process? Is one orientation more basic to the sense of self than the others? May there be a hierarchical order of selves?

What have various theorists said concerning the experiential bases of the sense of self? Which continuities of experience can be seen as essential to the individual's continuing conviction that he is the same person today that he has been in the past? Finally, what avenues of research

might prove fruitful for advancing knowledge in this area?

The Continuity of Bodily Feelings as a Basis of Sense of Self

Four aspects of bodily awareness have received much attention from theorists investigating the sense of self. First, there is nervous feedback from joints, skin, internal organs, muscle, and external sense receptors. Such feedback provides information as to states of temperature, pain, and pressure, as well as the senses of sight, smell, taste, touch, and hearing. A second aspect is awareness of the emotions--anger, joy, regret, etc., which are "felt," although not usually localized in specific parts of the body. A third aspect is the awareness of controlled body movement, controlled through what is commonly known as an exercise of will. Finally, a fourth kind of bodily awareness often considered to be important to the self is a mental image of the body, a continuously carried picture of "what it is I look like."

These four aspects continually appear in the following historical review of theories holding to a bodily awareness basis of self. Such a view has two features recommending it. The first stems from the fact that the human body is a continuous entity existing in physical space. Thus, one's perception of his body is a continuous, unifying aspect of experience. A second advantage is that continuous awareness of the body is immediate in experience. This advantage is particularly relevant when one compares bodily awareness continuities to social role and values

continuities. Whereas one could conceivably be minimally aware of the social role and values continuities present throughout his lifespan, he could hardly remain unaware of the continuities of awareness of his body.

There are difficulties, too, in identifying the self with continuities of bodily awareness. One's experience of his body may well change radically due to aging, illness, transplantation, or loss of parts. And yet this change may not effect a change in the individual's sense of who he is. Secondly, total identification of the sense of self with body awareness precludes any view of the self as including important elements of social roles or values.

Both Aristotle and Plato recognized a connection between awareness of self and bodily awareness. Aristotle (Ross, 1942) classed two of the four biologic aspects we have mentioned as essential to the soul, or self--"local movement," (the ability to control movement in the body's parts), and the nervous feedback continuities of sensory perception. Both biologic aspects Aristotle saw as part of the irrational, "lower" self. Plato (Rantz, 1938) defined the important continuities of self as ones of bodily awareness, conceiving of the self as tripartite--composed of seats of rationality, courage, and appetite, located in the cranium, chest, and abdomen, respectively.

Late nineteenth century psychology produced four names which stand out as advocates of a body awareness basis for the self-feeling: Cooley, Titchener, James, and McDougall. Titchener (1898) held that

all mental processes are composed of organic sensations and the "affections" of pleasantness and unpleasantness. Self-consciousness is composed of three elements: the totality of organic sensations, a mental image of the body, and the verbal label "I" with its attendant description provided by parents and peers. These three elements are fused into a "core self" by the affection of pleasantness or unpleasantness.

Cooley (1922) went farthest, perhaps, of any theorist in positing the existence of a "self-feeling" as a separate, innate emotion. He identified the sense of self as the subjective, emotional experience of the "appropriative instinct," an innate urge to exert individual power and control. To paraphrase Descartes, "I desire to control, therefore I am."

McDougall (1908), like Cooley, stressed the importance of later social influence on self-concept. Also like Cooley, he posited a bodily awareness origin for the self. Whereas Cooley saw the appropriative instinct as basic to the self, McDougall saw twin instincts of self-display and self-abasement as essential. For McDougall, the sense of self is composed of pride and subjection, the subjective, emotional experiences of these self-instincts.

Although William James' writings on self are complex, the "self of selves" in his theory is one of bodily awareness. James identified this self of selves as being the perception of certain continuous actions--the "adjustments"--emanating from inside the head. The felt adjustments are the acts of attending, assenting, negating, and making an effort

(1890); together they act as the gates to consciousness. It is perception of these adjustments which lends continuity and unity to experience. James speaks also of the "I," and the "spiritual self," and along with the "self of selves," these would seem to contribute to a sense of self. The "I" is the passing Thought in the stream of thought, this Thought being seen as possessed of the properties of recognizing and appropriating all past thoughts as its own. The spiritual self, highest in a hierarchy including also material and social selves, is seen by James as "a man's inner or subjective being . . . that which we most verily seem to be (1890, p. 296)."

More modern psychologists have generally been vague regarding which bodily awareness continuities are basic to the sense of self. Allport, in speaking of the "proprium"(1955) (the experienced self), has singled out "bodily sense" and "ego enhancement" as two essentials of the sense of self. The first of these, "bodily sense," includes a perception that the self is located behind the eyes, within the head. In describing "ego enhancement," Allport affirms the existence of innate emotions of self-satisfaction and pride. His six other aspects of the proprium include both social role and values continuities. Together with those of bodily awareness, these six aspects form a theory of self as comprehensive as that of James.

Another modern theorist, D. R. Miller (1963), notes six aspects of the experienced self, among them two related to bodily awareness--

"bodily feelings" and the "control of activities." Other aspects include the self as "axis of meaning" (a continuity related to the valuing process), and the "self in social relations."

The experience of controlling one's own movement and activity is seen as the basis of the sense of self by several modern theorists. These include Angyal (1941), Bakan (1966), and Tabachnick (1967). Their theories echo the Aristotelian view of the essential importance to selfhood of the individual's sense of his own control over bodily movement.

Let us summarize what we have found to this point. Nervous feedback from bodily organs is essential to the sense of self according to Aristotle, Titchener, Allport, Miller, and others. Theory in this area suffers from lack of specificity--one would like to know which are the feedback mechanisms vital to the sense of self, and why. Which organ systems and which modes of sensory information provide experiential information necessary to the sense of self? Empirical studies relevant to this question are sparse, but suggest that sensory deprivation (Reed and Sedman, 1964), sleep deprivation (Federn, 1952), and psychotomimetic drug effects (Luby, Gottlieb, Cohen, Rosenbaum and Domino, 1962; Reed and Sedman, 1964) are potentially fruitful research areas.

The innate "self-feeling," and other emotions like pride and subjection (McDougall, Allport, Cooley), have also been seen as aspects of bodily awareness essential to the sense of self. Empirical verification of these claims has been nonexistent, and various theories of emotion,

like that of Schachter (Schachter and Singer, 1962), would even deny the possibility of an innate "self-feeling."

Autonomous control of the body has been emphasized by Aristotle, and more recently Bakan and others, as essential to the experience of self. Opposing the notion that autonomous control actually exists, except as a cultural myth or a mask covering ignorance, are such writers as Watts (1961) and Skinner (1953). Whether or not autonomous control of movement is actually the case, the experience of autonomy may well be a contributor to the sense of self.

Finally, a mental image of the body has been cited by Titchener, Allport, and Schilder (1950), among others, as vital to selfhood. The exact relationship, however, between sense of self and body image has not been made clear.

The Continuities of Social Life as a Basis of Sense of Self

During his lifetime, an individual plays many socially defined roles of interpersonal interaction. These roles organize behavior and attitudes of individuals toward each other, and render social interaction more predictable and efficient. But what of the claim that a man is nothing but the roles he plays? Let us look at those theories which have held that an individual's sense of unity and continuity in himself is solely a reflection of his place in the social web--the result of being treated by others as a continuous entity.

Idealist philosophers of the 17th and 18th centuries spawned the principal ideas of contemporary social role theories of self. From Kant (1927), Hegel (Stace, 1924), Royce (1895), and Baldwin (1899) came four tenets of modern social role theory. First, that there exists indeed a "self" to be studied for each individual, and that this self is the basic determinant of his behavior. Second, that the self is developed through social interaction. Third, that all selves are in some way all alike, i.e., developed through lawful processes from the same materials. And fourth, that one can know himself only to the extent that he knows others. These four idealist premises are implicit in much of modern theory, exemplified by Goffman and H. S. Sullivan.

Sullivan (1953) laid the groundwork for a thoroughgoing social basis of self. In his view, individuals engage in a constant search for mutually good, i.e., secure and intimate, anxiety-free relationships with each other. There is thus a positive spur to development of a consistent self acceptable to others--it gains their approval and care. There is a negative spur also--anxiety--which is the lot of any individual who does not present a consistent self to others. Since anxiety in one person induces anxiety in others, the total community has a stake in seeing to it that each new member of society develops a self which will not be anxiety-inducing. The consistent ways each person develops to handle situations so as to minimize anxiety are unified in a structure known as the "self-system," or "self-dynamism." Part of the self-system is a personification of self;

that is, a picture of oneself as a continuous entity. This personification serves the self-system's larger purposes, and would also seem to provide a partial explanation for the sense of self.

Goffman does not present an explicit theory of self; however, Presentation of self in everyday life (1959) comes near to doing so. According to Goffman, each individual spends most of his important time with other people engaged in role-playing. One engages in roles because they are efficient ways for individuals to interact with each other, through a commonly held definition of reality, to satisfy their individual needs. This "common definition" is of role relationships, defined with respect to each other so that an individual playing a given role can expect a predictable outcome from a situation involving others willing to play complementary roles. The individual, through socialization, learns the implicit and explicit rules for playing roles. The deeper and broader his ability to play various roles in the culture, the greater his capacity to meet needs effectively and with a maximal amount of variety and enjoyment. For Goffman, the self could then only comprise some abstraction of the most important or most continuously played roles.

Other role theorists have been less hesitant than Goffman in facing the question of the meaning of "self." Brim categorically states, "The learned repertoire of roles is the personality. There is nothing else. There is no core personality 'underneath' the behavior and feelings (Miller, 1963, p. 657)." Miller suggests that perhaps "a man's self may

be defined in terms of his unique manner of playing his roles (1963, p. 672)."

Role theory, by its very nature, renders difficult the explanation of continuity and especially unity in personal experience. By stressing the influence of role on defining behavior, the theory downgrades the influence of role player, and thus provides no explanation for the individual's feeling that indeed he is a continuing entity. In an attempt to escape from the sterility of role theory, Biddle and Thomas (1966) have postulated the "self-role." In their words, "Even though we may suppose that all attitudes originate in some role-taking, the self-role can become autonomous . . . independent of the role-taking relationship which originally gave rise to it (p. 157)." Although this statement shows recognition of the problem of locating the self in role theory, Biddle and Thomas do not outline the precise conditions under which the self-role develops.

In another attempt to "humanize" role theory, Kay (1966) emphasized that the self engages in roles with expectations of enhancing and manifesting its own values. Further, that it commits itself in relative degrees to roles. Unfortunately, Kay does not specify what "self" should be understood to mean. If role theory is to be useful in understanding the unities and continuities underlying "self," it must not continue either to avoid the term or to imbue it with magical powers. Goffman commits the former sin most flagrantly; Kay, the latter.

Role theorists since Linton (1936) have worked to explain more

fully what specific role behavior consists of, how roles are entered into, and what purposes they serve for the individual. Most have not, however, dealt extensively with the relationship between roles and role-player. This most important relationship is considered by both C. G. Jung (1953) and Erik Erikson (1956). A principle determinant of the sense of self, in Jungian theory, is the extent to which ego identifies with the persona; that is, the extent to which the role-player identifies with his roles. Persona, the unified, continuous set of social roles by which an individual is known to the world, is nevertheless but one small facet of the total personality. Thus, strong ego identification with the persona, although creating a strong subjective experience of unity and continuity of self, is a psychically unstable condition.

With Erikson's insistence that society's interpretation of the classical Freudian psychosexual stages is vital to the course of individual growth, he declares the importance of social role and social definition. By so doing, he places the continuities of social life on a par with those of the instinctual life in forming the basis of a unified, continuous, self-feeling, the "ego identity." The formation of this identity is a synthetic task of the ego, and requires the integration of "constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles (Erikson, 1956, p. 71)." Out of these varied and often contradictory demands and tendencies toward action, the individual must create a sense

of being one unified being. Consistent social roles are seen as just one component of the sense of self, but they form a most important part of the ego identity. As Erikson puts it, "The young individual must learn to be most himself where he means most to others (1956, p. 57)." And in support of Erikson, Shands (1963) states that "the self to be most useful must agree closely in form with the reciprocal definition maintained by others. When there is a major crisis, the public definition always take precedence over the own definition (p. 320)." Erikson, like Jung, succeeds in stressing the importance of social definition to the sense of self, while not equating the two. In so doing, they make two of the few theoretical efforts to translate the continuities of social life into experienced continuities of self.

One major problem, when attempting to explain the experienced sense of self as dependent on social continuities, is how translation occurs from objective social role-playing to subjective individual experience. Another is that of multiple roles. How are the many social roles one plays related to a sense of unity, of self? One possible answer is that not all roles contribute to the sense of self, but then one must specify how the degrees of relevance of various roles are determined. Another possibility is that some process of abstraction occurs which creates a "self role" out of bits and pieces of salient roles. If this be so, it must be determined how such a process operates. These two problems--of translation and the multiplicity of roles--have not been resolved as yet. Experimental

work regarding the relationship between the sense of self and continuities of social life is lacking. Destruction of the sense of self through destruction of social relationships has not been attempted in the laboratory; concentration camp (Frankl, 1959) and brainwashing experiences (Lifton, 1956; Meerloo, 1958; Schein, 1956) may be "real life" examples of this phenomenon.

The Continuity of Values as a Basis of Sense of Self

Another approach has been to emphasize the importance of goal-oriented behavior in contributing to the sense of self. It suggests that values, goals, and activities engaged in while pursuing goals are all relatively persistent throughout the life of an individual. A sense of self might therefore conceivably be based on a continuing value structure, continuing ways of realizing goals, or simply the continuing capacity to value. How could these three continuities of the valuing process act as potential contributors to the sense of self?

Values, although they may be in awareness, may also be obscure or unknown to the person pursuing them. Thus a "central value," a collection of values, or a hierarchical value system may persistently be operative throughout an individual's lifespan, but to contribute to the sense of self, it must be translated into a continuity of experience. Awareness of such values would, of course, be such a translation, but where theories fail to emphasize conscious values as a basis for the sense of self, we

must ask what is the relevant continuity in experience.

Persistent goals are concrete manifestations of persistent values, and habitual striving for their attainment is part of the valuing process. Can a sense of self be derived at least partly from continual repetition of goal-oriented behavioral sequences? It would seem possible, in that one can easily observe continuity in his own repetition of behavior. However, a feeling of unity would seem to require apprehension of a unitary value structure underlying the many disparate activities carried on continually by a given individual.

The continuing capacity to value is attractive in that, of the three continuities considered here, it is most immediate to awareness. One's underlying values may well be unknown to him. He may also be unaware that he is continually repeating similar behavior. He does know, however, that he labels some things as "good" and others as "bad." There is an immediate experience associated with these labels: one likes the good and dislikes the bad. The capacity to value is thus attractive as an experiential continuity potentially basic to the sense of self.

We shall find that those writers who place importance in the valuing process as basic to a sense of self have done their important work within the past forty years or so. The relatively late emergence of a literature of values-based self coincides with the rise of existentialist movements in philosophy and theology, and the concern of modern man with meaning in a world seemingly governed by huge and impersonal forces of technology.

For Adler (Ansbacher, 1956) the process of self-formation begins in infancy with experienced feelings of inferiority. These feelings induce the formation by the child of a "fictional final goal," an idealized version of a person whose powers and abilities compensate for the specific inferiorities felt by the child. Throughout his life, the FFG serves for the individual as an organizer and director of behavior, leading him into attitudes and activities which will, hopefully, gradually turn him into the very person represented in the fictional final goal, a person who has conquered the inferiority of his past. The Adlerian sense of self is thus tied up with a continuing value structure determined by the FFG, and continuing ways of behavior which are used to reach persistent goals in life. The fictional final goal reminds us of the "ego ideal," and of the prime importance Freud placed on values continuities, through the agency of the superego, as unifiers of an individual's experience.

Angell agreed that the sense of self is based partly on the valuing process. Concerning the basis of one's conviction that he is a persistent, identical self, Angell wrote (1920), "My anticipations also play a part, for again and again there recur the same desires for the same ends as yet unattained (p. 164)."

Among more modern theorists, four stand out as most important contributors to the values-based self: Keniston, Wheelis, Maslow, and Rogers.

Keniston's interest centers on Erikson's fifth stage of psychosocial

development, the crisis of identity vs. identity diffusion. However, whereas Erikson stresses the need for the individual to come to terms with social roles he is expected to play, Keniston instead places prime importance on the necessity for the individual to commit himself to values if he is to form and maintain an identity. Says Keniston (1960),

> Any sense of personal identity achieves much of its coherence from commitment. The object of commitment can vary--a lifework, a central value, some personal talent, loyalty to a person or a group, a wife or a family, a corporation or a revolution--all can give identity to an individual; but without some positive commitment, a sense of personal wholeness is difficult to achieve (p. 185).

For Maslow (1959), human behavior is organized on the basis of a hierarchical system of "instinctoid" behavior--an instinct being seen as an innate behavior necessary for both avoiding illness and achieving growth. The hierarchical system is arranged on the basis of strength of need--lower animal instincts, like those for food, being strongest. When these lower needs have been satisfied, higher instinctoid processes take over in the motivation of behavior. These higher motivators Maslow calls B-values (B for Being). They require devotion from the individual and lead, if he pursues them far enough, to an identification of self with value.

The process of becoming increasingly motivated by B-values Maslow calls "self-actualization." By including the commitment to values in a hierarchy of basic human needs, Maslow places values continuities in a defined relation to continuities of bodily awareness, and permits the sense of self to be based on either or both, depending on the individual's

degree of self-actualization.

Less systematic than Maslow, Wheelis also speaks of a hierarchical system of values as necessary for a sense of self. Says Wheelis, "Values determine goals, and goals define identity (1958, p. 74)." He states further that the sense of self depends on a feeling that one's actions and beliefs are in harmony--that one understands the world in a way consistent with his actions in it. This sounds much like Keniston's description of commitment and identity diffusion, and, as with Keniston, we must ask Wheelis if not knowing who one is means the same as not knowing that one is.

C. R. Rogers (1967) posits that each individual maintains an innate "organismic valuing process." This process is a computer-like mechanism which processes past experience along with present perception, and comes out with an evaluation of the present situation, a suggested course of action for the individual to follow. Such evaluations of the present are signalled to the individual through his bodily feelings--if he but pays close attention to his internal feeling states, he will sense what is the optimal present behavior for him. The organismic valuing process, says Rogers, has been developed through natural selection; thus it has the capacity to provide not only for the individual's "self-actualization," but also for the species survival.

Only when the organismic valuing process (instead of "neurotic facades") is controlling awareness does the individual sense that he is

"being himself." The sense of self is thus an important signal to the individual that he is pursuing, however temporarily, a healthful course in life. This sense of self is the perception of internal feeling states, unified in their capacity to indicate what is right and wrong for the individual. Such evaluations are made in the light of stable "value directions" evolved as aids to self-actualization. Rogerian theory combines continuities of bodily awareness with those of values in one theoretical construct--the sense of being one's "real self"--which is at once an affective experience and a cognitive evaluation of the present best path toward self-actualization.

Several other theorists have emphasized the importance of values to the sense of self. Allport (1955) in recognizing eight aspects of the "proprium," lists three which are associated with the valuing process--"ego extension," "self image," and "propriate striving." Lecky, one of the first to stress the importance to selfhood of a persistent value structure, proposed that "all acts of an individual have the goal of maintaining the same structure of values (1945, p. 10)." Frankl (1959) offers evidence that sense of self depends on the maintenance of values. Having worked as a concentration camp physician and inmate, Frankl relates that if an inmate could not preserve deeply held values and hope against his oppressors' definition of reality,

> He lost the feeling of being an individual, a being with a mind, with inner freedom and personal value. He thought of himself then as only a part of an enormous mass of people; his existence descended to the level of animal life (1959, p. 49).

In summary, the following points can be made regarding the values-

based view of self:

1. The valuing process is attractive as a basis for the sense of self due to its continuity, availability to awareness, and capacity to organize consistent and continuous behavior.

2. Its principal difficulties seem to be a problem in integrating values continuities with social and biological continuities, and the tendency for many theorists to see the valuing process as being used by only a limited, elite, "actualized" group of individuals.

3. Theories stressing the importance of commitment to values in maintaining sense of self are, with rare exception, notably weak in their explanations of the mechanisms causing one or another particular value to be identified with the self. Without understanding how one can commit himself, or why he chooses a given value for commitment, one cannot have a full understanding of either the sense of self or the valuing process.

Discussion

There is a wide disagreement as to the existence and nature of a specific "self-feeling." On one side stand such theorists as Cooley, Allport, Horney (1950), and Rogers, who claim that an innate, affective basis of self exists as a unifying, continuous influence on behavior. The function of this feeling is seen to be as a motivator to activities which are good for the growth of individuals and also for the survival of the species. While some theorists appear not to accept the notion of an innate self-

feeling, they do identify the sense of self as an awareness of certain other biologic continuities. For example, James identified the sense of self with movements supposedly felt in the head. Such writers look upon "sense of self" as a label which one learns to apply to certain continuities of affect and feeling. Finally, a sizable group of theorists rejects the notion of a self-feeling and holds to a cognitive basis of self. This group, including Brim (Miller, 1963), Sarbin (1952), Skinner (1953), and Watts (1961), states that, in effect, one does not "feel" he is a continuous entity, he "knows" it. For these writers, the experience of self is principally the experience of being treated as a self, and an individual could conceivably be reared devoid of notions of selfhood.

One cannot deny the cognitive aspects of self, nor the affective and nervous feedback continuities. The emotions, self-image, and controlled body movement are all kinds of bodily awareness that persist. These feeling-laden experiences would seem, like the cognitive aspects, inseparable from the sense of self, if only in that one learns cognitively that part of his "self" are his feelings and body. It is this synthesis of social definition with internal feeling states which Erikson describes as the process of identity formation.

Accepting both cognitive and affective bases of self, what problems are outstanding? As Hilgard (1949) suggested, the self-concept should be inferrable from long-term observation of behavior, if indeed one is motivated primarily by his concept of self. In the absence of such

observation, self-report techniques have been used to ascertain the self-concept. Until self-report techniques are more successful in circumventing the problems discussed by Combs and Soper (1957) and Wylie (1968), such techniques will remain barren. Wylie, in particular, has been vigorous in pointing out the obstacles presently standing between experimenters and successful elucidation of knowledge regarding the self-concept. She points to the following major problems: (1) Self-theories are often couched in terms not amenable to scientific investigation. (2) Relevant, well-controlled studies are especially difficult to conduct in a new area of research. (3) Self-research has been, on the whole, a series of one-shot affairs, lacking coordination into a synthesized effort. (4) Avoidable flaws in methodology and research design presently abound--flaws such as lack of construct validation for questionnaires, Q sorts, etc., and failure to provide information on their reliability.

Problems also remain regarding the affective bases of self. It remains as yet unclear exactly which external and internal senses and which patterns of nervous activity are vital to the self-feeling. Also, the relative importance of controlled body movement, the mental image of self, and various emotions have not been empirically determined.

Along with debate over the relative contributions of cognitive and affective factors to the sense of self, disagreement among theorists also remains as to which dimensions of subjective experience are vital to an individual's recognition of himself. The dimensions most often cited as

relevant in this regard are continuities of bodily awareness, social role-playing, and the life of values. However, most self-theories emphasize one of these three dimensions at the expense of the others, and there remains a lack of integration among social role, values, and bodily awareness theories of self. While several theories do emphasize the importance of all three types of continuity--specifically those of James, Freud, Maslow, Allport, and Erikson--none specifies in detail how these three types of experience are related to each other and to a unitary sense of self.

I have proposed that continuities of bodily awareness, values, and social role are all relevant to one's sense of self. Can we accurately assess an individual's self-concept by defining it in its three different modes, noting also the relative importance of each mode? For one individual, we might find his self-concept to lie principally within the "values" sphere, in which he would have a well-differentiated and important (to him) sense of himself as "a man who values . . ." Correspondingly, his conceptions of himself as a biological organism and as a social role-player might be ill-defined and only weakly important to his notion of "who I am." The relative importance of bodily awareness, values, and social role in one's self-concept might well be predictive of how the individual perceives others. For example, a consequence of defining oneself chiefly in one of these modes might be that one is sensitive to perceiving and classifying others in the same mode, even when these others' self-concepts are in fact based principally in another mode from one's own.

Communication may well be more difficult between individuals holding to different modes of self-definition. For example, one defining himself chiefly in terms of values and another who sees himself chiefly as a social role-player might draw widely differing inferences from the same communication and thus find it difficult to reach a common understanding. Such a "communication gap" could be especially relevant to the psychotherapeutic situation, but generally would be important for all efforts at meaningful communication.

Summary

Which aspects of his experience are necessary to an individual's continuing conviction that he is a persistent entity, the same person from day to day? This question has not been answered empirically, and, in theory, many experiential bases for the sense of self have been proposed. These theories can be classified into three groups--those stressing the continuities of bodily awareness, that is, the regularities of perception of bodily states; those stressing the continuities of social life, symbolized by the unique position each person holds in the matrix of human social relationships; and those stressing the continuities of valuing, the persistent beliefs, attitudes, and goals which mark the individual personality. Although when taken alone each of these groups of theories seems inadequate to the task of explaining the sense of self, each has an important contribution to make. It is probable that bodily awareness, social role, and values continuities in some way all contribute to sense of self,

although present theory is not capable of detailing these complex relationships. One would like the answers to such questions as (1) is there a developmental sequence, perhaps from bodily awareness through social role to values, in the type of experiential continuity contributing most strongly to the sense of self? And (2) which socioeconomic and individual difference factors are relevant in determining the relative importance of bodily awareness, social role, and values continuities to the sense of self?

Although there remains great need for further theoretical work in this area, it may yet be productive now to begin attempting the assessment of individuals' self-concepts in all three relevant modes, noting the relative importance which each subject places on each mode. Then the study of relationships between this tripartite self-concept, characteristic ways of perceiving others, and characteristic ways of using and interpreting language, might well prove fruitful in learning how individuals perceive themselves and are in turn perceived by others.

CHAPTER II

EMPIRICAL STUDIES

The foregoing discussion has presented a conceptual framework for considering the experiential bases of the sense of self. It is claimed that there are three major dimensions contributing to each individual's sense of self--experiential continuities of bodily awareness, social role, and the valuing process. The relative importance of each of these three continuities may vary among individuals, and the varying importance of these dimensions may have implications for general patterns of personality.

The tripartite sense of self is a theoretical construct suggested by the results of reviewing established theoretical postures and research on the self. What follows represents an effort at demonstrating empirical referents for this construct. The basic strategy for accomplishing this empiricization was as follows.

The demonstration of empirical referents for a theoretical construct in personality, such as the tripartite self, involves several steps (Anastasi, 1968). First, the construct must be operationalized in some way so that for a given person at a given time, an assessment can be

made of his status regarding the parameters suggested by the construct. Having made this assessment, the experimenter can then seek to discover whether predictions based on theoretical considerations are borne out in the actual behavior of the individual. If such predictions are borne out, evidence is available to support the hypothesis that the theoretical construct has validity, and that the assessment device is effective in measuring relevant parameters.

In the case at hand, the construct under consideration was the tripartite self. In seeking a means of assessing this self, a device utilizing self-report was chosen. Although the self-report method contains some undesirable features (Combs and Soper, 1957) which will be explicated later, nevertheless it was felt that a well-designed self-report could effectively assess some of the personality facets suggested by the theory of self-modes.

I have said that the second step in construct demonstration is a prediction of behavior based on the results of assessment. In this study, the behavior to be predicted consisted of response tendencies on several personality measures--two projective measures (one verbal and one graphomotor), and a Semantic Differential task. These particular kinds of behavior were chosen for several reasons. First, regarding projective measures, responses to these devices have often been seen as disclosing certain important perceptions of the self (Machover, 1949; Murray, 1951). Thus, such responses might well be among the types of behavior

predictable from knowledge of an individual's self-mode structure. Although many writers have challenged both the underlying theoretical assumptions (Lubin, 1960; Murstein, 1961) and the empirical justification (Anastasi, 1968) for the use of projective devices to reveal personality, these measures continue to be used widely and with enthusiasm by many clinicians. Critics have especially noted the lack of empirical support for the projective hypothesis; namely, that an individual will reveal important, enduring facets of his personality when faced with the task of structuring a response to an ambiguous stimulus. They have also deplored the relative lack of studies attempting to validate projective devices against external criteria, and have commented on the confusion introduced by the dearth of objective scoring procedures associated with most of these instruments. Indeed, these criticisms merit close attention; however, in the present study the somewhat questionable validity of projective measures was thought to be not so serious a drawback as to warrant their exclusion from consideration. The principal reason for attempting to predict behavior on the Semantic Differential task was that this device has proved to be of value in exploring the relative meaningfulness, to a given individual, of various concepts (Mitsos, 1961; Snider and Osgood, 1969). Recall that, in theory, an individual's self-mode structure may strongly influence the relative meaningfulness of various words to him. Thus, performance on the Semantic Differential might well reflect the status of a subject's self-mode structure.

The finding of response tendency differences among the self-mode groups would not only demonstrate the "tripartite self" concept, it would also give empirical referents to the abstract definitions of the three self-types in terms lending insight into their "real-life" behavior. This could prove valuable, because the lack of empirical referents of the term "self" has been, throughout the literature, a major obstacle to the study of its development, significance for understanding behavior, etc.

Having sketched the strategy pursued in this research, let us examine more closely the plan which was followed and its rationale. First, an effort was made to develop a means of measuring the individual's sense of self in terms of the three self-modes, noting the relative salience of each. The investigator developed a 46-item questionnaire for this purpose. By means of their questionnaire responses, subjects were to be separated into groups composed of persons reflecting primarily "bodily awareness," "social role," or "values" self-modes, or into another mixed group whose members stressed equally two or all three of these dimensions. The second part of the research involved an effort to demonstrate the value of this tripartite classification of self by showing the existence of systematic response tendency differences among the three self-mode groups. All subjects were given three tasks, on which performance was expected to vary among groups of subjects basing their self-feelings in different experiential dimensions. These tasks consisted of affective reaction to stimulus words (measured by the Semantic

Differential), responses of a graphomotor nature (a human figure drawing), and responses of verbal expression (the writing of a story).

Previous research has established that a connection exists between one's view of self and his special sensitivity to certain words (Fisher, 1964; Kamano and Drew, 1961; Van Krevelen, 1961). The connection has been shown in these studies through demonstrations that subjects will selectively recall words which are especially relevant to their individual self-concerns. Another way of measuring sensitivity to certain words is to ask if subjects attach more meaning to these words than to others. This is the approach taken in this study. The magnitude of a subject's affective response to a stimulus word should be a sign of the meaningfulness of that word to him (Mitsos, 1961; Snider and Osgood, 1969). Thus, if an individual's primary self-mode is an organizer of his perceptions, stimulus words particularly relevant to that mode should have much special meaning for him, and therefore elicit from him a relatively strong affective response (Mitsos, 1961; Taylor and Mangan, 1962). For example, one whose sense of self rests primarily on a bodily awareness basis should, by this reasoning, make a relatively stronger response to a stimulus word concerning the body or bodily functions than would a person whose self is values-based. For the latter individual, excluding conditions of illness or physical danger, most bodily aspects or bodily-related words do not touch on his principal concerns. Thus, a "bodily awareness" person should react more strongly to a word like "fat" than

would a "values" person. I therefore expected differences among the self-mode groups in their affective reactions to stimulus words. The magnitude of such affective reactions to words is measured in this study by the use of Osgood's Semantic Differential.

One could also expect responses of a nonverbal type to reflect the individual's primary self-mode. One important sphere of nonverbal behavior is graphomotor activity and it is here, in the personal "signature" expressed by an individual's drawings, that I looked for further evidence of the primary self-mode. In particular, I looked at subjects' human figure drawings. Given such a task, individuals have been found to rate their drawings closely to ratings they assign to themselves (both ratings being done by Semantic Differential) (Kamano, 1960). These findings suggest that the human figure drawing is in some ways a representation of self. In this study, the question was whether there were characteristics which differentiated the figure drawings done by each of the self-mode groups. Specifically, I sought to discover whether there were differences in the quantitative, "formal" characteristics of the drawings--figure area, height, and centeredness--which could be interpreted as reflecting differences in the magnitude of these groups' self-regard (Lakin, 1956, 1960). A second query was whether such "content" aspects of the drawings as facial expression, clothing, body proportion, and body stance differentiated the groups. There was no reason a priori to expect self-esteem to be greater in subjects of any one group as opposed to the

others: the formal characteristics of figure area, height, and centeredness were thus not expected to differ among self-mode groups. On the other hand, the finding of such differences, should they exist, would differentiate the self-mode types on an important dimension of personality--self-esteem. For this reason, formal characteristics of the drawings were measured. In contrast to the expected lack of differences among self-mode groups vis-a-vis formal characteristics, intergroup differences were expected in content aspects of these drawings. The literature suggests that there are content differences between the figure drawings done by such groups as "clothing narcissists" and "body narcissists" (Machover, 1949), groups which resemble the "social role" and "bodily awareness" types in some ways. Also, differential emphasis on the physical body is one of the major dimensions on which the self-mode groups are expected to vary. Thus, for several reasons I expected that nonquantitative content differences might well occur among the self-mode groups' drawings.

The third area of response to which I looked for reflections of the self-mode was creative verbal expression. Each subject was asked to write a story "about the person you have drawn," immediately after completing his human figure drawing. Thus each subject wrote a story about a person, presumably indicating some of his perceptions and concerns regarding people. This task shares with the TAT the requirement for the subject to tell a story about a human figure drawing and, as with the

TAT, I expected the story themes to reveal something of the subject's concerns and perceived relationships with others. Unlike the TAT, my situation required the subject to draw a human figure, and if indeed (as Machover and Kamano suggest) the drawing of a human figure stimulates an individual's fantasies regarding his own body, then drawing a figure immediately before writing a story would seem to prime the subject for writing about topics salient to the way the self is experienced. The stories, then, should indicate some of each subject's perceptions and concerns regarding people in general, and himself in particular. In further support of this hypothesis, Fisher (1965) found that subjects' creative fantasy clearly contained themes related to the way self was being experienced at the time. My first interest in the stories therefore was their thematic content. I asked if stories written by, for example, "values" subjects differed systematically from those written by other self-mode groups of subjects. My second interest in the stories was related to the subjects' differential usage of the stimulus words provided. The question was whether individuals holding to a particular self-mode use mode-appropriate words with characteristically high frequency when writing a story. Such a result might well occur if, as I have proposed, words appropriate to a given subject's self-mode are more meaningful to him than they are to other individuals.

Method

Subjects

The subjects of this study were 200 college undergraduates--122 males and 78 females. They were predominately freshmen and sophomores, ranging in age from 18 to 20 years. All subjects were enrolled in introductory psychology courses, and participated in this research in order to fulfill a course requirement. Prior to receiving the research materials, subjects were told nothing regarding either the purposes of this study or the nature of their participation.

Measures

The Draw-a-Figure, Tell-a-Story, Self-Mode Questionnaire, and Semantic Differential were administered in this order to all subjects in the form of an 8-page booklet. The Draw-a-Figure and Tell-a-Story were presented first because it was seen that these measures, having a game- or play-like quality, proved appealing to subjects. The comfort and interest in the situation thus elicited were felt to be valuable aids in minimizing defensiveness. Low defensiveness was desirable when the subjects were later confronted by the potentially anxiety-provoking Self-Mode Questionnaire. The Semantic Differential is a measure on which relatively rapid and "first impression" responses are required. Thus, it was presented to subjects as the last task, at a time which presumably minimized tendencies to dawdle or obsess over individual items.

These four measures are described below, beginning with an account of the Self-Mode Questionnaire constructed by the investigator.

1. Self-Mode Questionnaire

This instrument is a 5-page questionnaire containing 46 multiple-choice items, preceded by these instructions: "Circle your answers to the questions below. Try to select the one best answer, the one you feel most strongly about, when several answers seem appealing." The questionnaire items were constructed so as to assess the subject's self by measuring the extent of his personal involvement with a wide range of aspects of bodily awareness, social role, and the valuing process.

Bodily awareness concerns. Questions regarding the subject's attitudes toward health and sickness, physical deformities, sleep, hunger and thirst, hearing, vision, physical exercise, sex, energy level, physical appearance, emotionality, weight, and temperature sensitivity all aim at tapping the subject's awareness of and amount of concern for these aspects of bodily function. For each questionnaire item answered so as to indicate such concern, the subject received a "plus 1" score on the Bodily Awareness scale, henceforth referred to as the "BA" scale.

Social role concerns. Questionnaire items were included to assess the subject's attitudes toward being sociable, the importance of voice and communication skills, his own tendencies to be compliant and persuasible, and his need to avoid loneliness. Items related to the need for close family and friendship relationships, the importance of keeping order and

structure in job, sex-role, and the society at large, and the importance of helping others also were included. These items all aim at tapping the subject's awareness of and concern for these various aspects of social role. For each question answered so as to indicate such personal involvement, the subject received a "plus 1" score on the Social Role scale, henceforth known as the "SR" scale.

Values concerns. Questions regarding the subject's attitudes toward the importance of upholding religious, moral and ethical values, identifying with idealistic causes and people, standing up for unpopular opinions, working to achieve personal goals and overcome handicaps, and maintaining standards of excellence, all aim at tapping the subject's awareness of and concern for various aspects of the valuing process. For each question answered so as to indicate such concern, the subject received a "plus 1" score on the Values scale, henceforth referred to as the "V" scale.

Below appear three items from the questionnaire, included here in order to give the reader familiarity with both the form and kind of content appearing in this instrument.

Item #23: Where would you place yourself on this spectrum?

A	B	C	D	E
Very masculine	More masculine than feminine	Many traits of both masculinity and femininity	More feminine than masculine	Very feminine

Item #28: Which of these goals would you say is most important to you?

A	B	C	D	E
Maintaining good health	Winning the respect and liking of others	Having a close, happy family	Achieving excellence in some field of endeavor	Achieving a gratifying sexual relationship

Item #38: Do you feel very energetic?

A	B	C	D	E
Very energetic				Lethargic

In the sample items above, responses were scored in the following way. In item #23, responses A and E scored on the "SR" scale, while B, C, and D did not score on any scale. In item #28, responses A and E scored on the "BA" scale, responses B and C scored on the "SR" scale, and response D scored on the "V" scale. In item #38, responses A and E scored on the "BA" scale, while all other responses did not score on any scale.

Questionnaire items are of several forms, some employing the forced-choice technique and others being Likert-type self-rating scales. Some of the forced-choice items contain alternative responses scorable on two or all three of the scales, as item #28 above. Other items can only be scored on one of these scales. Of the total 46 items, 24 contain responses which score on the "BA" scale, 25 contain responses which score on the "SR," and 24 contain responses scorable on the "V" scale. In addition, almost all questions contain at least one response which does not score on any of the three scales. Thus, a subject was not forced to

choose a characteristic self-mode response on every item. The inclusion of nonscorable responses was intended to conceal from subjects the underlying theoretical framework on which the questionnaire was based. This design feature also served to provide the subject with a greater chance to find a response on each question conforming to his attitude on the issue at hand.

2. Semantic Differential

Factor analysis has shown that three dimensions--potency, activity, and evaluation (Snider and Osgood, 1969)--are strong determinants of Semantic Differential ratings regardless of what the polarities are called in a given study. Thus, these three dimensions, represented by the polarities "Strong--Weak," "Active--Passive," and "Good--Bad," respectively, were used in this study. Subjects were requested to give their ratings, on a 7-point scale, on each of these three dimensions to each of 33 words. The words were selected for their theoretical appropriateness to one or another of the three self-modes. Intermingled in the list of 33 words were 10 "Bodily Awareness Words," 10 "Values Words," and 13 "Social Role Words."

An analysis of variance was intended to determine whether self-mode groups of subjects indeed responded differentially to the self-mode sets of words. Further, in order to measure a subject's magnitude of affective reaction to a given word, a "polarity" was to be calculated (Heise, 1965). The polarity is defined as the square root of the sum of

the squares of the three individual ratings for the word. In order to render comparable various individuals' reactions to a given word, a comparability not possible when simply the absolute polarity is used as a measure of response strength, I have devised the DFM. The DFM, or deviation from the mean response to all 33 words, gives an index of the strength of a subject's reaction to a given word relative to his reactions to the other 32 words on the list, which is the information we seek.

3. Draw-a-Figure

In this first section, the subject was presented with a sheet of paper which was blank except for printed instructions at the top reading, "Take about five minutes and draw a human figure on this page. Make it a whole person, not just a face, and please, no stick figures. When you have finished, go on to Part B on the next page."

Quantitative measures on the figure drawings were determined in the following ways. Heights of figures were measured to the nearest inch. Distances from the center of the paper to the figure's center were calculated by placing a transparent grid over each drawing; the grid establishes the center of the paper and contains concentric circles around this center, with each circle separated by one-fourth inch from the next. Areas of drawings were measured by using a planimeter, an extremely precise cartographer's tool.

These quantitative, or formal aspects of the figure drawings were to be compared along with nonquantitative, or content, aspects. The

figure drawings of all 200 subjects varied widely along many dimensions of content. After rating the drawings on many of these dimensions, the investigator isolated those aspects of drawing content which appeared to occur more frequently in the drawings of one group of subjects as opposed to other groups. There were seven such aspects. These were (1) the presence of a uniform or costume; (2) the appearance of hostility or anger; (3) a thoughtful or pensive appearance; (4) the drawing of a "Joe College" figure; (5) emphasis on the physique or selected body parts; (6) the usage of simple, schematic clothing; and (7) the appearance of unhappiness. All 200 drawings were then submitted to two independent raters for their judgments regarding the presence or absence of these seven aspects. For each aspect, the decision to be made by the rater for each drawing was simply "yes, this drawing contains the aspect I am considering," or "no, this drawing does not." The three sets of ratings, the investigator's and the two other raters', were then compared. Inter-rater agreement was required to determine finally whether a given drawing met or did not meet a given criterion, e.g. "thoughtfulness." A drawing was considered to have met the "thoughtfulness" criterion, for example, if at least two of the three raters judged it so.

4. Tell-a-Story

Upon completion of the Draw-a-Figure, the subject proceeded to the second page of the booklet, an otherwise-blank sheet headed by the following instructions:

Now take about another five minutes and write a story about the person you have drawn in part A. Use the words below, any or none of them, as many times as you wish. They are there to help stimulate your thinking about the kinds of stories you might write.

status	tingle	honestly	painful	believer
feeling	hope	theatrically	trustworthy	authority
value	imitate	excitedly	sociable	body

These fifteen stimulus words were chosen from the list of thirty-three presented to subjects in the Semantic Differential. There are five "Bodily Awareness Words," five "Social Role Words," and five "Values Words." Within the group of five words representing each self-mode, there are two nouns, one adjective, one adverb, and one verb. Thus, the words representing the self-modes are matched for parts of speech, and were arranged on the page so that all adverbs were grouped in one column, all verbs in another, etc. The matching by parts of speech and the grouping of words by the same principle both served to provide the storyteller with easily accessible and comparable alternative words from which to choose when he sought to use a stimulus word from the list. Although all fifteen stimulus words were chosen with the proviso that they be familiar to most speakers of English, no attempt was made to control precisely for frequency of usage among self-mode sets of words. Such a control was not necessary, for the hypothesis to be tested was that a given mode-appropriate word would be used more frequently by its corresponding self-mode group of subjects than by other groups. This would be so no matter what the precise frequency with which the word is used by the

general population, so long as its usage is common enough to insure general familiarity with the word. This condition was certainly met in the case of each of the stimulus words used in this study.

The Grouping of Subjects by Questionnaire Scores

After administration of the instrument to the 200 subjects was completed, they were grouped on the basis of their BA, SR, and V questionnaire scores. For each subject, these three scores were computed in the following way: an individual's BA score was simply the total number of questionnaire items on which he chose a response indicative of strong personal involvement with some aspect of bodily functioning. His SR and V scores were also determined by summing the number of questionnaire items responded to in the appropriate fashion.

Table 1 illustrates the mean and range of scores on each of the three scales, for all 200 subjects. It can be seen that the means and standard deviations are quite comparable for the three scales, a condition which allows for usage of the raw scores as is, obviating the necessity for conversion to standard scores.

A subject was placed in the "BA Group" is his BA score was at least 2 points higher than his scores on both SR and V, and regardless of where his BA score stood relative to the mean BA score for all subjects. This grouping is thus on a purely ipsative basis. Similarly, a subject was placed in the "SR Group" if his SR score met the same criterion, with the

Table 1

Scores on the Three Questionnaire Scales: Means, Standard Deviations, and Ranges (200 Ss)

Scale	Maximum Score Possible	Mean Score	Standard Deviation	Range
BA	24	8.4	2.7	2 - 15
SR	25	8.2	2.7	0 - 16
V	24	9.3	3.2	1 - 18

substitution of the SR score as the one being at least 2 points higher than both of the other two. He was placed in the "V Group" if his V score was at least 2 points higher than both his BA and SR scores. If his three scores met none of the criteria for the three self-mode groups just described, the subject was placed in a "Mixed Reference Group." Using these grouping criteria resulted in 67 subjects (33.5% of the sample) being placed in the "V Group," 32 subjects (16%) comprising the "BA Group," 32 subjects (16%) falling into the "SR Group," and 69 subjects (34.5%) belonging to the "Mixed Reference Group." This information is summarized in Table 2.

All four groups--"BA," "SR," "V," and the "Mixed Reference Group"--had about the same ratio of males to females.

Results

Let us quickly retrace our path to this point. Exploring various bodies of theory regarding the self led to positing three principal experiential bases of the sense of self. These were the continuities of bodily feelings, social role, and the valuing process. It was further posited that each of these three dimensions of experience could assume varying relative importance to the sense of self, depending on the particular individual studied. The question then became, can this theoretical view of self be operationalized? Can the relative contributions be assessed of bodily awareness, social role, and values continuities to the individual's sense of self? To accomplish these purposes, a questionnaire was

Table 2

Sizes of Self-Mode Groups and Mixed Reference Group, as Determined by Scores on the Questionnaire Scales

Self-Mode Group	Number of Subjects	Percent of Sample (N = 200)
"BA"	32	16.0
"SR"	32	16.0
"V"	67	33.5
"Mixed Reference"	69	34.5

developed and used to provisionally separate subjects into self-mode groups on the basis of their responses. In order to establish validity for this grouping, three different but self-related tasks were presented to the subjects--a figure drawing, a creative story, and a Semantic Differential. The hypothesis was that if the tripartite self is indeed an element of personality affecting multiple behaviors, and if the questionnaire were successful at assessing this element, then subjects grouped together by their questionnaire responses should also display similarities in their performance of the self-related tasks. I shall now review the results of this study.

The Self-Mode Questionnaire

The grouping of subjects on the basis of their various scores on the BA, SR, and V questionnaire scales presumes that these scales do in fact measure relatively independent variables. Statistical support for this hypothesis is derived from the intercorrelations of the three scales. Table 3 illustrates the relative independence of the BA, SR, and V scales. All intercorrelations are low, being below $r = .17$. The correlation coefficient of highest magnitude between scales is $r = -.1658$, between BA and V. This correlation (significant at the $p < .05$ level) indicates that common variance between the two scales represents only about 3% of the total variance for either. This small, negative correlation may well be explained in part by the forced-choice technique employed in many questionnaire items. Such a technique creates a situation where choosing a

Table 3

Intercorrelations (r) Among Questionnaire Scales
(200 Ss)

	Scale		
Scale	BA	SR	V
BA	1.0000		
SR	.1027	1.0000	
V	- .1658[a]	- .0870	1.0000

[a] $p < .05$.

response scorable on one scale simultaneously shuts off an opportunity to score on another scale. If for any two scales this situation is duplicated on many items, a negative correlation between those scales will be found. For the BA--V correlation being considered here, its sign and magnitude indicate that to a small but significant degree, seeing oneself primarily in terms of the valuing process, as measured by the questionnaire, is not compatible with seeing oneself primarily in terms of bodily functioning. The correlation, however, is low; for the most part, as was expected, the BA, SR, and V scales are independent of each other.

Affective Response to Selected Stimulus Words

The "BA," "SR," and "V" groups are clearly distinguishable on the basis of their responses to the Semantic Differential task. Table 4 illustrates the self-mode groups' differential responses to sets of words hypothesized to be "BA Words," "SR Words," and "V Words," respectively. In this analysis of variance, Factor A is the groups of subjects, Factor B is the self-mode sets of words, and Factor C is the three dimensions of response on the Semantic Differential--activity, potency, and evaluation.

The results of this analysis demonstrate that the self-mode groups of subjects did, in fact, react differentially to the self-mode sets of words hypothesized to be especially salient to them. This effect (AB) is significant at the $p < .001$ level, and is one of three found to be significant

Table 4

Analysis of Variance of Groups of Subjects' Responses to Sets of Words on Three Dimensions of the Semantic Differential

	SS	df	MS	F
Between Subjects	199.40	113		
A. Self-Mode groups	8.68	2	4.320	2.51
Subjects within groups (error a)	190.72	111	1.720	
Within Subjects	136.13	912		
B. Sets of words	10.93	2	5.470	24.86[b]
AB	6.68	4	1.670	7.59[b]
B x subjects within groups (error b)	48.00	222	0.220	
C. Semantic differential dimensions	1.10	2	0.550	3.31[a]
AC	0.20	4	0.050	
C x subjects within groups (error c)	36.91	222	0.166	
BC	6.98	4	1.750	31.82[b]
ABC	0.79	8	0.099	1.80
BC x subjects within groups (error bc)	24.54	444	0.055	

[a] $p < .05$.

[b] $p < .001$.

at this level. The other two are effects B and BC. Effect B is the main effect of the sets of words--its significance indicates that the three self-mode sets of words were, in fact, responded to as sets, differentiable one from another. Effect BC is the interaction between sets of words and dimensions of the Semantic Differential. That is, a given set of words was reacted to more strongly on one dimension of the Semantic Differential than on the others. Chief among these findings were that "Values Words" were reacted to more strongly on the Evaluation dimension, as would be expected, and that "Bodily Awareness Words" were reacted to more strongly on the Activity dimension, another not surprising result.

An effect significant at the $p < .05$ level is from Factor C, denoting differential response by subjects to the three dimensions of Activity, Potency, and Evaluation. For present purposes, this finding is incidental.

From the analysis of variance, then, confirmation is found for my prediction that self-mode groups of subjects would react differentially and more strongly to sets of words pre-selected as appropriate to them. It is also found that those sets of words labeled as "BA Words," "SR Words," and "V Words" were, in fact, reacted to as groups, establishing validity for the classification.

Table 5 illustrates a slight modification of the ABC table from which the least-squares analysis of variance was done. In Table 5 the self-mode groups' mean responses are illustrated, whereas in the ABC table used for the analysis, the groups' total responses appeared.

Table 5

Mean Responses of Subjects in Self-Mode Groups to Sets of Words on Three Semantic Differential Dimensions

	"BA Words"			"SR Words"			"V Words"			
Group	Activity	Potency	Evaluation	Activity	Potency	Evaluation	Activity	Potency	Evaluation	Total
"BA"	1.89	1.66	1.68	1.71	1.54	1.52	1.57	1.62	1.66	14.85
"SR"	1.95	1.84	1.66	1.87	1.85	1.70	1.85	1.90	2.14	16.76
"V"	1.66	1.57	1.46	1.60	1.50	1.38	1.76	1.85	2.00	14.78
Total	5.50	5.07	4.80	5.18	4.89	4.60	5.18	5.37	5.80	46.39

By way of illustrating the differential self-mode group response to mode-appropriate words, Table 6 presents the 10 words, out of 33, receiving the largest mean polarity (affective response) from each self-mode group. The 10 words are ranked in order, from the strongest elicitor to the tenth strongest. From Table 6 it can be ascertained that subjects in the group "BA" did exhibit their strongest reaction to words ("fat," "excitedly," "painful," and "sickness") having reference to bodily states. Similarly, the subjects of group "V" reacted most strongly to words ("hatred," "hope," and "goal") having apparent connection with the valuing process.

The group "SR" reacted most strongly to several words ("goal," "hatred," and "hope") which, theoretically, are more nearly bound up with the valuing process than with the life of social roles. It should also be noted, however, that all groups of subjects reacted very strongly to these three words, indicating that they exert a strong emotive pull on all subjects, outweighing the differentiating effects of self-modes. Also, "SR" subjects did react most strongly to "competence," "father," "athlete," and "married" in their next group of five words following the top three, thus showing the expected "SR" sensitivity to social role-oriented words.

When the four words appearing on all three self-mode groups' "top ten" lists were removed as being universally affect-inducing words, the words remaining on each list (Table 7) illustrate a differential sensitivity

Table 6

Ten Words, Ranked, Eliciting Largest Mean Polarities from Each Group of Subjects

	Groups							
	"BA" (N = 26)		"SR" (N = 27)		"V" (N = 61)		"Mixed Reference" (N = 59)	
1.	fat	3.85	goal	4.42	hatred	4.10	hatred	3.82
2.	excitedly	3.81	hatred	4.14	hope	4.02	goal	3.58
3.	hatred	3.81	hope	4.02	goal	3.95	married	3.46
4.	painful	3.65	competence	4.00	feeling	3.83	hope	3.42
5.	sickness	3.59	father	3.99	honestly	3.60[e]	sickness	3.39
6.	goal	3.51	sickness	3.92[a]	trustworthy	3.59[e]	fat	3.37
7.	body	3.46	athlete	3.90[a]	father	3.55[e]	excitedly	3.37
8.	father	3.43	married	3.88[a]	believer	3.47[e]	painful	3.34
9.	brotherly	3.40	excitedly	3.78[b]	competence	3.41[e]	honestly	3.32
10.	hope	3.39	authority	3.71[c]	brotherly	3.34[e]	good	3.30
	authority	3.30[d]						

Note:--Significance levels of differences between word #1 and succeeding words (for Self-Mode groups only).

[a] $p < .05$.

[b] $p < .02$. t test (two-tailed) for correlated means.

[c] $p < .01$.

[d] $p < .05$, t test (one-tailed) for correlated means.

[e] $p < .002$, z test.

Table 7

Words Eliciting Strongest Mean Polarities, by Self-Mode Group, with Removal of Words Shared by All Groups' Top Ten Lists

	Self-Mode Groups					
	"BA"		"SR"		"V"	
1.	fat	3.85	competence	4.00	feeling	3.83
2.	excitedly	3.81	sickness	3.92	honestly	3.60
3.	painful	3.65	athlete	3.90	trustworthy	3.59
4.	sickness	3.59	married	3.88	believer	3.47
5.	body	3.46	excitedly	3.78	competence	3.41
6.	brotherly	3.40	authority	3.71	brotherly	3.34

for each self-mode group to words related to its hypothesized principal mode. Thus, of the six strongest affect-inducing words remaining on each group's list, in each case most of these words are intimately related to the expected experiential continuity.

Table 6 demonstrates that the 10 words eliciting the strongest affective response from each self-mode group differ from group to group, and in general reflect the dimension on which the group's self-feeling is based. Besides this propensity for strong reaction to given individual words, it has been seen that each group of subjects responded differentially to that whole set of words which was made part of the list of 33 due to its hypothesized relevance to each respective self-mode.

To look more closely at the relationship between self-mode groups of subjects and their reactions to self-mode sets of words, we again consider the measure DFM, calculated from the polarity. Recall that the DFM is our measure for assessing the relative strength of a group's reaction to a particular word. Using the DFM allows us to compare the various self-mode groups' reactions to a given word. For example, the mean response of group "V" to all 33 words was 3.06 polarity units. The mean response of this same group to the word "trustworthy" was 3.59 units, or +0.53 units stronger than its mean response to all words. By comparison, the group "SR" responded to "trustworthy" with a mean polarity of 3.61. The mean "SR" response to all 33 words was 3.42. Thus, the "SR" response to "trustworthy" was a DFM of +0.19. The "V"

response to the word "trustworthy," DFM = +0.53, is thus greater than the "SR" response to the same word, DFM = +0.19, showing that relative to its responses to other words on the list, the "V" group responded more strongly to "trustworthy" than did the "SR" group.

Figures 1, 2, and 3 illustrate the differential responses of self-mode groups to the so-called "BA Words," "SR Words," and "V Words." For the first set of 10 words, the "BA Words," it can be seen that the group "BA" responded to these words with a mean DFM of +0.208. By contrast, subjects in the opposed group, "SR plus V," responded to the "BA Words" with a mean DFM of -0.078. The difference in response between the "BA" and "SR plus V" groups to the "BA Words," 0.286 polarity units, is significant at the $p < .03$ level. Thus, in their stronger response to words related to bodily functioning, "bodily awareness" subjects distinguished themselves from subjects whose self-feelings are based principally in other experiential dimensions.

The data linking "V" subjects with 10 previously hypothesized "V Words" are even stronger (Figure 2) than those related to "BA" subjects and "BA Words." Here it can be seen that the typical "V" subject reacted to the average "V Word" with a DFM of +0.405 units. In the opposed group, "BA plus SR," subjects reacted to the "V Words" with a mean DFM of +0.078 units. The difference in response to the "V Words" by the two opposed groups was thus 0.327 polarity units, which is significant at the $p < .001$ level. "V" subjects, then, responded differentially and

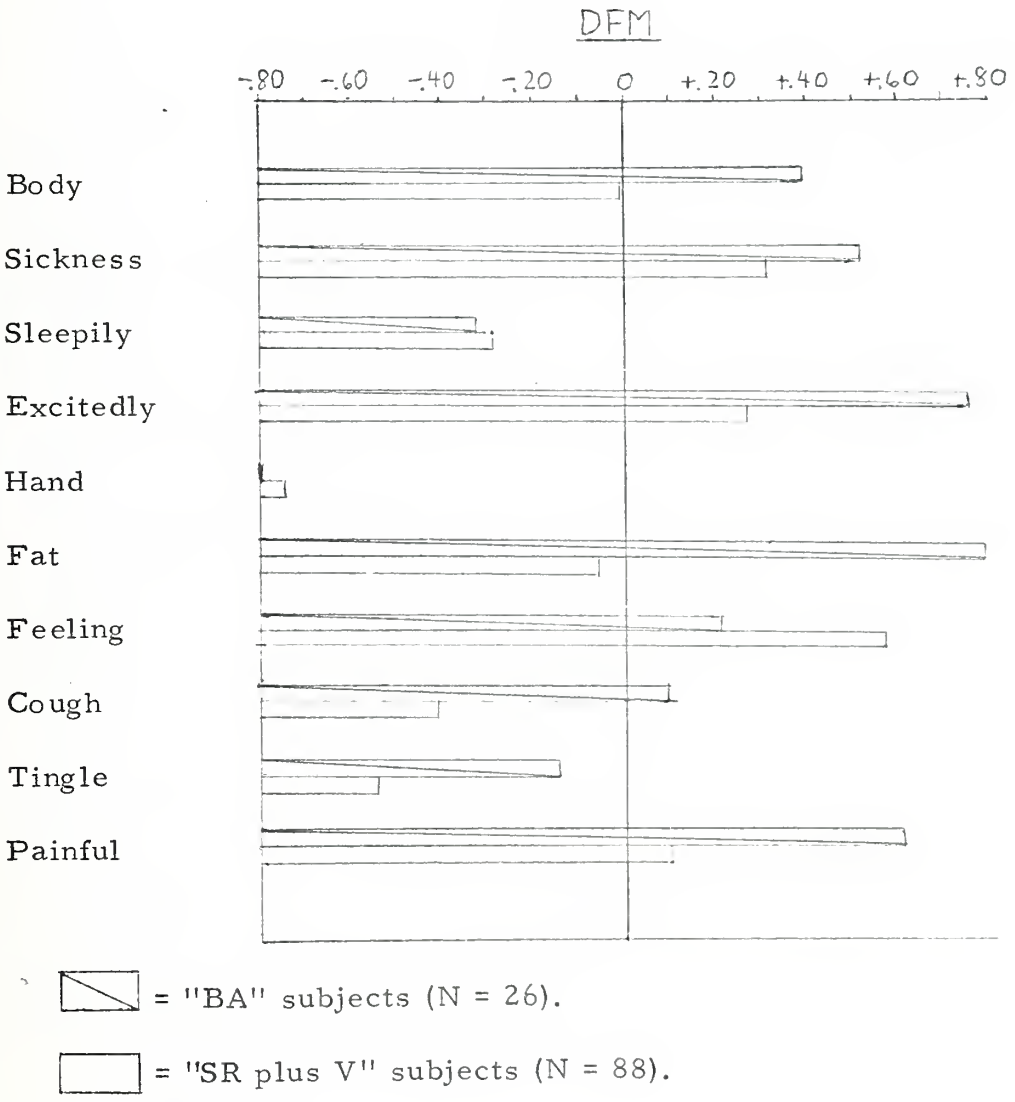

Figure 1. Response to 10 "BA Words" by Groups of Subjects, Measured as Deviation from the Groups' Mean Responses to All 33 Words. "BA" subjects responded to this set of words more strongly than did the "SR plus V" group; t test, $p < .03$.

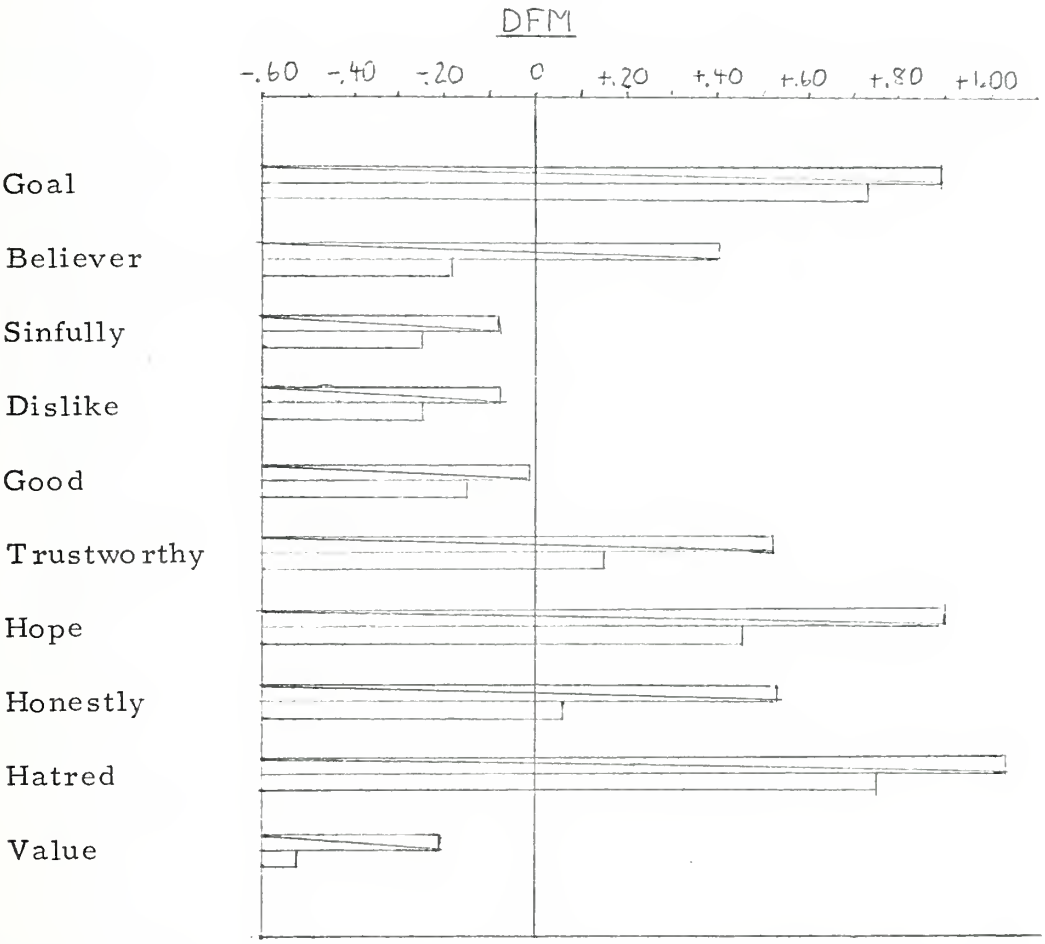

Figure 2. Response to 10 "V Words" by Groups of Subjects, Measured as Deviation from the Groups' Mean Responses to All 33 Words. Group "V" responded more strongly to this set of words than did "SR plus BA"; t test, $p < .001$.

Figure 3. Response to 13 "SR Words" by Groups of Subjects, Measured as Deviation from the Groups' Mean Responses to All 33 Words. Group "SR" responded more strongly to this set of words than did "BA plus V" when "imitate," "brotherly" and "theatrically" were removed; t test, $p < .01$.

more strongly to "V Words" than did other subjects, and this was true over a wide range of specific words.

The picture is not quite so clear (Figure 3) for "SR" subjects and the 13 "SR Words." Although for most of these words the DFM for the group "SR" is more positive than that for the opposed group "BA plus V," the relationship between "SR" subjects and "SR Words" does not attain statistical significance for the group of "SR Words" taken as a whole. Inspection of Figure 3 reveals, however, that this failure to reach significance is due principally to atypical responses to only a few of the 13 "SR Words." Specifically, responses to "imitate," "theatrically," and "brotherly" were atypical in that, unlike other "SR Words," the group "SR" responded to these three words less strongly than did "BA plus V" subjects. Indeed, when these three words were removed from the "SR Words" list, statistical significance is attained for the hypothesis that "SR" subjects respond differentially strongly to "SR Words." Specifically, with a confidence level of $p < .01$ (t test), over the 10 words remaining on the "SR Words" list, "SR" subjects responded more strongly to these words than did "BA plus V" subjects.

Figure Drawings

A. Content Characteristics

The findings in this area (Table 8) are that (1) uniformed or theatrically costumed figures appear significantly more frequently ($p < .05$) in the "SR" group's drawings than in others; (2) thoughtful, pensive

Table 8

Frequency of Figure-Drawing Content Aspects Found in Drawings of Self-Mode and Mixed Reference Groups, as Determined by Inter-Rater Agreement

Content Aspect	Total No. Found in 200 Drawings	Number Found in Drawings of Self-Mode Group	Chi-Square	p
Comic, theatrical costume or uniform	14	7 in "SR" Group	4.81[a]	< .05
Pensive, thoughtful appearance	35	19 in "V" Group	6.95	< .01
"Joe College" look	13 20[b]	7 in "BA" Group 8 in "BA" Group	6.95	< .01

[a]For statistical purposes, the "SR" group had to be combined with the "V" group in order to increase sample size for this calculation.

[b]For statistical purposes, to increase sample size, drawings rated "Joe College" by only one rater had to be included. This lessened the percentage of total "Joe College" drawings done by "BA" subjects, but even this lower percentage attained $p < .01$ significance.

characters appear more frequently in the "V" group's drawings ($p < .01$); and (3) figures drawn to look like "Joe College," i.e. those wearing college monogrammed sweaters, fraternity T-shirts, or carrying books, etc., occur significantly more frequently ($p < .05$) in the "BA" drawings. No other content aspects proved to occur significantly more frequently in one group than in others.

Inter-rater agreement for the three aspects attaining statistical significance was consistently high, as can be seen in Table 9. For these three aspects, the mean agreement by any pair of the three raters was 90.4%, indicating agreement on 181 drawings out of 200. It should be noted that raters #2 and #3 agreed with each other as well as either agreed with rater #1, the investigator. Raters #2 and #3 had never met at the time they judged the drawings.

B. Formal Characteristics

As expected, the groups "BA," "SR," and "V" did not differ among themselves regarding either mean area, height, or centeredness of their figure drawings. Nor did these groups differ on these formal characteristics from the "Mixed Reference" group. The mean areas, heights, and distances from center for these four groups' drawings are reported in Table 10.

When selection criteria for the self-mode groups were made more stringent, reducing their sizes to 11 members in each group in order to pick up more subtle differences if they existed, the findings again failed

Table 9

Inter-Rater Agreement on Content Dimensions of 200 Figure Drawings

	Content Dimension		
	Comic, Theatrical Costume or Uniform	Pensive, Thoughtful Appearance	"Joe College" Look
Rater Pairs	% Agreement	% Agreement	% Agreement
Rater #1 (investigator) and Rater #2	91.5	84.0	95.5
Rater #2 and Rater #3	93.0	84.0	94.0
Rater #1 and Rater #3	90.5	86.0	95.0

Note:--Mean inter-rater agreement on the three dimensions = 90.4%.

Table 10

Formal Characteristics of Figure Drawings Done by Groups of Subjects

Group	N	Mean Area (Sq. in.)	Mean Height (In.)	Mean Distance from Center of Paper to Center of Drawing (In.)
"BA"	32	6.5	5.8	1.3
"SR"	32	6.7	5.4	1.3
"V"[a]	41	7.7	5.8	1.1
"Mixed Reference"	95	7.6	5.7	1.3

Note:--All differences not significant.

[a]In order to insure that subtle differences would be picked up, if they in fact existed between groups, the "V" group was reduced in size.

to show any intergroup differences in the formal characteristics of the figure drawings.

In another attempt to discover any possible relationships existing between self-mode structure and self-esteem, correlation coefficients were obtained between each of the formal characteristics and each of the three scales on the questionnaire. The only correlation attaining significance is that between the V scale and the centeredness of figure drawings; to a significance level of $p < .05$ over all 200 subjects, increasing V scores were correlated with more exactly centered figure drawings (Table 11).

Although correlation coefficients between the V scale and figure height and area did not attain significance, they were nevertheless positive. Thus, with one correlation attaining significance and both others positive, there is the possibility of a relationship between the V score and the three measures of formal characteristics which had previously been linked with self-esteem.

A final finding in this area is the relationship between measures of each of the three formal characteristics and the total score, "T," obtained for each subject by summing his BA, SR, and V scores on the questionnaire. The significance of the T score, while not at all clear, would seem to be perhaps as a measure of reactivity, expansiveness, or other similar generalized response tendency. Although the relationship between "T" and figure drawing formal characteristics does not attain

Table 11

Intercorrelations Between Figure Drawing Formal Characteristics and BA, SR, and V Questionnaire Scales

Questionnaire Scale	Figure Area	Figure Height	Figure Centeredness
BA	.0652	.0333	-.0607
SR	.0377	-.0027	-.0122
V	.0754	.0817	.1497[a]

[a] $p < .05$.

statistical significance over all 200 subjects, it does so when contrasted groups of "High T" subjects and "Low T" subjects are compared. Correlations between "T" and figure drawing area, height, and centeredness are all in the direction of suggesting a link between increasing self-esteem and increasing T score. Table 12 illustrates these data.

Creative Story Writing

Let us first consider the frequency of usage of stimulus words in the stories. Recall the finding that on the Semantic Differential the various self-mode groups reacted differently to the three sets of words making up the list of 33. We now ask whether subjects in these groups used some of these same words with increased frequency in their stories. Table 13 illustrates the frequency with which each of 15 stimulus words was used by each of the self-mode groups, and by the total sample. It is apparent that to a great extent all of the stimulus words were used with very similar frequencies by all the self-mode groups. Thus, the self-mode groups did not use hypothesized mode-appropriate words with any greater frequency than did any other subjects.

The two exceptions to the generalization above are the following: "SR" subjects used the word "trustworthy" more often in their stories than did other subjects, and "V" subjects used the word "excitedly" more frequently. Both cases attain statistical significance ($p < .01$ and $p < .05$, respectively). These two exceptions, however, contrast with 43 cases where there was no difference in frequency of usage and may be due to

Table 12

Mean Area, Height, and Centeredness of Figure Drawings Done by Contrasted Groups of "High T" and "Low T" Subjects

	Subjects			
	"High T" (N = 9)	"Low T" (N = 9)	t	p
Mean area (Sq. in.)	14.5	5.8	2.97	< .01
Mean height (In.)	7.3	4.9	2.58	< .02
Mean closeness to center (In.)	0.98	1.48	2.20	< .05

Table 13

Frequency of Usage of Stimulus Words in Stories Written by Total Sample and by Self-Mode Subgroups

Groups	Usage of Individual Stimulus Words No. of Times Used and Per Cent of Total Stimulus Words Used							
	"value"	"sociable"	"hope"	"honestly"	"status"	"imitate"	"feeling"	"tingle"
Total sample	49 (8.28%)	50 (8.45%)	52 (8.80%)	41 (6.93%)	48 (8.11%)	25 (4.23%)	49 (8.28%)	16 (2.70%)
"BA"	7 (6.54%)	12 (11.21%)	9 (8.42%)	8 (7.48%)	9 (8.42%)	6 (5.61%)	11 (10.29%)	1 (0.94%)
"SR"	9 (8.74%)	10 (9.71%)	9 (8.74%)	6 (5.82%)	8 (7.77%)	5 (4.86%)	6 (5.82%)	2 (1.94%)
"V"	15 (7.82%)	13 (6.77%)	18 (9.37%)	14 (7.29%)	13 (6.77%)	7 (3.65%)	16 (8.32%)	6 (3.12%)

Table 13 (continued)

	"theatrically"	"body"	"painful"	"believer"	"authority"	"excitedly"	"trustworthy"
Total sample	22 (3.72%)	40 (6.76%)	40 (6.76%)	52 (8.80%)	41 (6.93%)	30 (5.07%)	37 (6.25%)
"BA"	4 (3.74%)	7 (6.54%)	5 (4.67%)	9 (8.42%)	10 (9.35%)	2 (1.87%)	7 (6.54%)
"SR"	4 (3.89%)	5 (4.86%)	7 (6.79%)	8 (7.77%)	8 (7.77%)	3 (2.92%)	13[a] (12.61%)[a]
"V"	7 (3.65%)	10 (5.21%)	15 (7.82%)	19 (9.90%)	13 (6.77%)	15[b] (7.82%)[b]	11 (5.72%)

Note:--All other intergroup differences not significant.

[a]Chi square = 8.08, $p < .01$.

[b]Chi square = 4.23, $p < .05$.

chance.

As Table 13 illustrates, the full self-mode groups of 67, 32, and 32 members, respectively, were used in determining the frequency of stimulus word usage by self-mode groups.

Let us now turn to the themes of stories written by subjects in the "BA," "SR," and "V" groups. To consider story themes effectively, it was necessary to decrease the size of each self-mode group to a manageable number. This was accomplished by choosing only those subjects who were most sharply differentiated as clearly in the groups under consideration, i.e. those subjects having the largest difference between their primary Self-Mode Questionnaire score and their other two scores. From the original 32 subjects in the "BA" group, a "select" group of 14 was chosen in this manner. From the original 32 subjects in the "SR" group, a select 13 were chosen. And from the original 67 "V" subjects, a select group of 16 was chosen. Table 14 shows the mean scores on the BA, SR, and V scales for these select groups of subjects. Here their mean scores are compared to mean scores for the larger self-mode groups from which they were taken. The following results are based on the select groups of subjects.

Below appear statements of the principal themes of each of the stories written by each subject in the select self-mode groups. These brief statements cannot, of course, convey the full impact of each story; they do, however, provide pictures of the experiential dimensions to

Table 14

Mean Questionnaire Scores of "BA" and "Select BA" Groups, "SR" and "Select SR" Groups, and "V" and "Select V" Groups

Group	N	Mean Questionnaire Scores BA	SR	V
"BA"	32	11.9	6.8	6.8
"Select BA"	14	13.3	6.8	7.2
"SR"	32	7.9	11.8	6.7
"Select SR"	13	8.2	13.4	6.1
"V"	67	6.9	7.1	12.4
"Select V"	16	6.8	6.8	15.1

which each storyteller was reactive. In order to convey each story theme and tone with greatest fidelity, the storytellers' own words are used in the following capsule statements. This method of data presentation is not intended to be quantitative, but rather illustrative, enabling the reader to identify characteristic "BA," "SR," and "V" themes.

Themes of the Stories Written by Subjects in Each Select Self-Mode Group

"Select BA"

S#13 --A dull girl, who hopes to lead a respected life.

S#34 --A novelist who wrote only to clarify his experiences for himself, not to publish, but who then discovered a hateful, base ambitiousness within himself, and thus found the value of his existence destroyed.

S#38 --Full-of-anger people-hater, who nevertheless smiles his way through most social situations, concealing his feelings.

S#41 --College student, confused by identity problems and social pressures, who for some unknown reason begins to take life more slowly, becomes happier, and is ready for new challenges.

S#44 --Greek God model-athlete who likes to feel his body work and likes to control and use it strenuously.

S#66 --A believer in the beauty of the human species, who writes about a girl who is the vision of loveliness to him.

S#70 --College student having a hard time of adjusting to society: should he do what he wants and be expelled or jailed, or should he do what society demands of him, and go absolutely crazy?

S#86 --Sketchy, frothy description of "Chris"--of no sex, happy, healthy, a reader of Roman Classics, a sandal wearer and harpsichord player.

S#113 --Comic-tragic story of a man who wants to make people happy by showing them the absurdity of life. He is killed by them for his non-conformity, but they later realize he was admirable.

S#123 --Man who appears to be similar to his friends, but who secretly thinks of himself as very different, and is pained by the problem that he needs to hide his real self from most people.

S#147 --"Joe College," good-looking and sociable, a would-be salesman and politician, who believes in God, America, and the value of a dollar. (He is depicted sarcastically by the writer.)

S#177 --Not particularly sociable or status-oriented man who hates to imitate others, and values being honest with himself.

S#187 --Happy boy who has a new switchblade, enabling him to boss others around, and to gain the sociability of an older boy, his hero, who has a big stolen knife collection.

S#195 --A stud--football player--well-liked, with all the sex he wanted, but with a problem nevertheless: he has no soul. Thus when he was hit and killed by a car, no one mourned. (Depicted sarcastically by the writer.)

"Select SR"

S#9 --Sociable, handsome varsity basketball player (as depicted by an adoring fan.)

S#17 --Clever, comic-tragic story of a teddy-bear-like physician who worked so hard for others that he wouldn't admit it when he got mortally sick, but remained fat and jolly to the end.

S#43 --"Average" teen aged girl who is comfortable with her parents' middle class way of life, and hopes to get her college degree and then lead a life much like theirs.

S#52 --Highly sociable would-be physician or psychologist--helping professional--whose painful personal problems cannot be told to his friends for fear that they would lose faith in his ability to help them.

S#68 --Fun loving, successful, sociable athletic male who is happy.

S#71 --Reckless, carefree skiier, whom others try unsuccessfully to imitate, and who will always come out on top. (As depicted by adoring fan.)

S#109 --High-ranking academic professor who successfully teaches without need for excess authority, due to his faith that his subject is worthwhile and his students eager to learn.

S#143 --Weird story involving a guy and a girl--she an actress of sorts--with theme of doing things for and to each other.

S#144 --High school junior, would-be great politician, whose friends and teachers are willing to help, and who is willing to work toward his goal. (The writer assures us of his future success.)

S#162 --Self-centered, bossy, status-oriented freshman girl whose rejection of her previous life-style--"a happy life living with God'--started her on the road to this unpleasant state. (As depicted by a worried and angry friend.)

S#172 --Hysterical girl who goes berserk dramatically around exam time, claiming that no one loves or trusts her.

S#193 --Unhappy little girl separated from her parents for years, who builds her hope for reunification with them into the center of her life, and becomes sociable and excited.

S#200 --Girl who compensated for a crippled leg through determination, and became a "dynamic personality," intelligent, easy to talk to, and good-natured. (As depicted by an admirer.)

"Select V"

S#3 --The Romantic ideal man (as depicted by a girl).
S#40 --"The helper," who learns that in order to be effective he must work on a personal, one-to-one, as opposed to an institutional basis.
S#61 --The "typical American," viewed negatively by the writer because of the American's supposed traits of apathy and submissiveness to authority.
S#64 --Responsible, happy, ambitious, successful, hopeful high school student who will learn a lot when he arrives at college.
S#88 --Aspiring poet who learns that life is both beautiful and ugly, and is thus able to write truth in her poetry.
S#93 --Man who strives to "know himself" and achieve control over his body; he succeeds through perseverance.
S#103 --Man whose status-consciousness prevents him from recognizing and dealing with his own feelings of loneliness. (As seen by a sympathetic but rather detached writer.)
S#106 --Projected college life of a successful, happy high school boy: college is seen as essentially a destructive, hateful place, but the boy will meet the challenge and emerge wiser and with real happiness.
S#107 --Man who realizes that it is up to the individual to make the most of his circumstances, and thus turns defeat (being drafted) into victory (making the Navy a career).
S#110 --Aspiring actress who fails to attain fame and success, and becomes resigned to just being herself, no matter how bad an actress she may be.
S#118 --The ideal of sensitivity and human compassion--religious, sociable, honest.
S#122 --Rambling account of a man who does not care what most people think he looks like, and does not like to be talked about. (As depicted by an admirer.)
S#150 --Boy searching for answers about life who experiences a satisfying feeling of belonging to the universe as he looks out to sea.
S#154 --Self-satisfied college girl whose search for answers has led her to examine all values she has held, and to rely on her own mind as the ultimate authority.
S#165 --Young man searching for identity who has come to appreciate the changes inherent in his life style, to be happy with his searching, changing mind.

S#180 --Young, idealistic girl timidly setting foot into the exciting but frightening world.

Perusal of this list of story themes reveals that those stories written by any one self-mode group of subjects have differentiating threads running through them, thematic characteristics which distinguish each group from the others. The "V" group's stories are characterized by heroes who could be called "rugged individualists." There is an emphasis on the lone, admired self's successful striving and surmounting difficulties in the attainment of lofty goals. While "V" stories are marked by a frequent emphasis on the "rugged individual," "SR" stories frequently depict their heroes as professional persons or as some other role designatee. Another oft-encountered aspect of these "SR" stories is an emphasis on the desirability and necessity of being "sociable," of getting along well with others. These aspects tend to differentiate "SR" stories from "V" stories, which present the individual's surrounding environment more as an impersonal arena of endeavor than as a social matrix.

Stories written by the "BA" group differ in several respects from those already considered. The typical "BA" hero, unlike his "SR" and "V" counterparts, is unhappy, confused, lonely, and bitter. These feelings are usually related to a sense of estrangement from others. Unlike "SR" stories, where other people play an important role in the hero's destiny, or "V" stories, where striving for a goal organizes and gives direction to life, the "BA" story is of a man isolated, unconnected to the

outer world by either ties of affection or goal-striving.

Discussion

Because all other results of this study were based on groups of subjects determined by a questionnaire, let us look first at this instrument. The validity of the questionnaire for assessing sense of self rests on two bases--content validation and the empirical results of usage. As used by Anastasi (1968), the term "content validity" refers to how adequately the instrument covers the field of behavior that it was designed to measure. In the case at hand, each of the three types of experiential continuity was analyzed into many aspects presumably related to those continuities, and an item was constructed for the questionnaire to tap the subject's degree of involvement with each aspect. This analysis was accomplished by utilizing information derived from consideration of the many "self theories" reviewed in Chapter I. The empirical results of the questionnaire's usage represent the second source of validity. The fact is that groups of subjects defined by their questionnaire responses responded as groups in other relevant areas, largely as predicted. This fact supports the hypothesis that the questionnaire does indeed group people on a basis having wider implications than simply common response tendencies in regard to one instrument.

Having considered sources of questionnaire validity, let us turn to shortcomings of the instrument.

In any case where an individual is asked to answer questions about

himself, as in my questionnaire, the resultant self-report may well obscure the underlying self-concept through such factors as low cooperation level, lack of awareness, and the ambiguity of interpretation of questions (Combs and Soper, 1957). In an attempt to circumvent these problems, questionnaire items were included which did not directly ask the subject to comment about himself, and subjects were anonymous. This anonymity was intended to remove a source of excess defensiveness.

Perhaps the most serious problem of the kind raised by Combs and Soper which still remains with the questionnaire is "subject's lack of awareness." That is, when an experimenter asks a subject a question about himself, the subject is expected to give an answer, and almost always does so. However, both questioner and respondent rarely question the validity of the answer in terms of the subject's understanding and intentions. Has he considered the question intently, or is he merely tossing off an answer to meet some external requirement or demand? Is he truly aware of his feelings regarding the matter at hand, or is he merely providing a convenient or socially desirable response? In the case at hand, the problem with the questionnaire method is that, to a large degree, it must presume that the subject is aware of the experiential bases of his sense of self. This presumption, however, may not be warranted in all cases--a given subject may not be aware of which experiences are central to his sense of being a continuous entity.

A second issue related to the questionnaire is the lack of statistical

validation of responses scored on one or another of the three scales. The final form of the questionnaire represents the culmination of three major and several minor revisions--efforts to modify the instrument in the light of information received from administering the questionnaire to many individuals, tabulating their responses, and discussing individual items with them. During this period of revision, items were continually added and dropped. Changes in questionnaire items were undertaken when it became clear that a given question was excessively ambiguous, often misinterpreted, or less capable than another item of eliciting the desired information. Thus, item analysis was a continuing concern during the development of the questionnaire. However, further development would require an analysis of each scorable response in statistical terms, done in the following way. Any response scored as, say, a "V" response would logically be expected to have been chosen more frequently by those subjects obtaining relatively high V scores than by subjects with low V scores. Thus, each scorable response can be analyzed statistically in order to ascertain whether indeed it meets this criterion. Responses failing to meet the criterion, for example a response scored "SR" which was <u>not</u> chosen most frequently by "SR" subjects, can be modified or eliminated. Such an operation would serve to make the questionnaire more internally consistent by insuring that all responses scored, for example, as "BA" were indeed responses selected more often by subjects scoring high on the BA scale than by those scoring low. This would

be a rational refinement of the instrument, leading to finer discrimination of individuals' self-mode structures.

Neither test-retest nor split-half reliability studies were carried out on the Self-Mode Questionnaire. Test-retest reliability, while being most valuable as a tool for constructing alternate forms of a test (Anastasi, 1968), would add valuable information concerning this questionnaire. A high test-retest reliability, of say r = .80 or greater over a several months' period, would imply that individuals' self-mode structures, or at least the questionnaire's assessments of them, were relatively stable over this time period. Such a test-retest study might well lead to further refinement of the instrument, and should be carried out. A reasonable approximation of test-retest reliability can be obtained with one administration of the questionnaire. This can be done by calculating a split-half reliability and using the appropriate transformational equation (Anastasi, 1968).

Several issues arise from the empirical results obtained by using the questionnaire. Considering the self-mode groups' responses to whole sets of words, it has been found that "BA" subjects reacted more strongly to the "BA Words" than did the other self-mode groups, which in turn reacted more strongly to words appropriate to their self-modes. Recall, however, that for "SR" subjects and "SR Words," one must remove three words from the list in order to obtain statistical significance for the hypothesis. Is it justifiable to remove "imitate," "theatrically," and

"brotherly" from the list of "SR Words"? Indeed, can the removal of any words from the three originally hypothesized lists be justified? Such a removal is reasonable in this case. This is so because with the original, unmodified lists, significant ($p < .001$) findings were obtained, supporting the hypothesis that each self-mode group would respond more strongly to its appropriate set of words than would the other self-mode groups. Having made this finding, slight rearrangement of the word lists on the basis of empirical findings may then increase our understanding of the self-mode types. Rearrangement is thus justifiable on this basis, and does not pretend to increase the statistical significance of the basic findings.

Returning to the three words removed from the "SR" list, the first two were initially placed on this list due to the dependence of social role learning on imitation, and the somewhat theatrical quality of social role playing, respectively. "Brotherly" was placed on this list because of its reference to a specific social role relationship. Inspection of the various self-mode groups' reactions to these words, however, is revealing. "Imitate" and "theatrically" were responded to in patterns similar to those we find for "fat" and "body": the "BA" subjects reacted considerably more strongly to these words than any other group. Upon reflection, one realizes that "imitate" and "theatrically" do have a considerable quality of "body-ness" about them--one imitates most often by physically duplicating a gesture or other physical movement, and to do something

theatrically, at least in common parlance, connotes an exaggeration of bodily motions or speech. In other words, considering that groups of subjects responded to "imitate" and "theatrically" as if they were "BA Words," and further that their connotations may well have more reference to bodily functioning than to social role, it is reasonable to remove these words from the "SR Words" list and place them on the "BA Words" list.

In like manner to the shift of "imitate" and "theatrically," it is evident that the word "brotherly" seems out of place on the "SR Words" list when judged by the atypical response "SR" subjects gave to it. Consideration of "brotherly" reveals a strong idealistic flavor in this adverbial form, as when used in "brotherly love," and perhaps helps explain why "V" subjects reacted to this word with a DFM of plus 0.28, while "SR" subjects reacted with less strength, a DFM of minus 0.12 units. Responded to much like a representative word from the "V Words" list, "brotherly" would seem logically to belong on this list rather than among the "SR Words."

Searching for other possibly misplaced words, only one more is found. "Feeling," originally hypothesized as a "BA Word" due to its organic connotations, is responded to by self-mode groups much as if it were a "V Word." This is a not surprising result, since the word is probably more often used to denote love or hate, like or dislike, i.e. values qualities, than to refer to the more physical meaning of "an

organic sensation," the meaning relevant to bodily function.

As final amended lists, then, Table 15 presents a grouping of the original 33 words into three categories, those words inducing differentially strong responses from self-mode groups "BA," "SR," and "V," respectively. This slightly amended grouping is, of course, more statistically significant than the hypothesized grouping, with "BA," "SR," and "V" groups reacting more strongly to their corresponding lists of words at significance levels of $p < .001$, $p < .01$, and $p < .001$, respectively. In the amended grouping, 29 of the 33 words are in the same lists as constructed beforehand; four words were moved to their final positions when self-mode groups did respond to them differentially, but not in the expected fashion. This amended list serves to provide a clearer picture of the concerns of each self-mode type.

Turning from the Semantic Differential task to human figure drawing, consider first the formal, or quantitative, aspects of these drawings. On the dimensions of figure area, height, and centeredness, the self-mode groups were not differentiated. However, there is a positive and significant correlation between the V score and figure centeredness over all 200 subjects, suggesting a link between the V score and a subject's self-esteem. Such a connection would not be inconsistent with findings in the stories--in these, "V" subjects very frequently wrote of successful, optimistic, admired heroes. Further consideration will be given to this issue when the "Values" personality, as he emerges from this study, is

Table 15

Stimulus Words Reacted to Differentially Strongly by Self-Mode Groups, as Amended from the Original Hypothesized Grouping

Self-Mode Groups		
"BA" (N = 26)	"SR" (N = 27)	"V" (N = 61)
Body	Married	Goal
Sickness	Sociable	Believer
Sleepily	Authority	Sinfully
Excitedly	Competence	Dislike
Hand	Govern	Trustworthy
Fat	Membership	Good
Cough	Father	Hope
Tingle	Athlete	Honestly
Painful	Status	Hatred
[a]Imitate	Preacher	Value
[a]Theatrically		[a]Brotherly
		[b]Feeling

Note:--Self-Mode groups reacted to these respective sets of words differentially strongly, as determined by one-tailed t test. Significance levels for support of this hypothesis are the following: for "BA" and "BA words," $p < .001$; for "SR" and "SR words," $p < .01$; for "V" and "V words," $p < .001$.

[a]By hypothesis, originally part of the "SR words" list.

[b]By hypothesis, originally part of the "BA words" list.

discussed.

Consider the relationship between formal characteristics of the figure drawings and the total score T, where T = BA + SR + V. Recall that for those subjects with an extremely high or low T score, the questionnaire seems to have acted as a measure of self-esteem or expansiveness, with "High T's" drawing large, centered figures and "Low T's" drawing small, off-center figures. The questionnaire was not designed to gauge self-esteem, and the T score has no immediately apparent meaning. Why then does the T score seem to act as some kind of predictor of "self-esteem," at least for the extremes of the sample? The relationship between T score and figure-drawing formal characteristics would seem to derive not from any specific items on the questionnaire, but rather from a generalized response set of certain subjects. Whether the relevant dimension of this response set be reactivity or productivity, cautiousness, negativism, or something else is not known at this point. Evidently, however, for both the "High T's" and "Low T's," styles of response to the questionnaire were operant which served to indicate the subjects' self-esteem, although providing little information on their self-modes.

Content aspects of the figure drawings differentiated the self-mode groups. These shall be considered shortly in the discussion of the Bodily Awareness, Social Role, and Values personality types which emerge from this study. Before doing this, however, let us first consider stories written by the subjects. We shall do so from two points of view--the

stories' thematic content and their frequency of usage of stimulus words.

As was noted previously, "V" subjects in their stories often stressed what could be called the "rugged individualist" view of life. That is, the "V" hero is seen as goal-oriented and striving in a world which often presents obstacles to his success, where, nevertheless, he perseveres and succeeds in attaining his goal. This is so whether the goal be helping others (S#40), attaining knowledge (Ss #64, 106, 150, 154), writing great poetry (S#68), "knowing oneself" (S#93), or attaining "real happiness" (S#106). The goals that "V" subjects set for themselves are lofty, and yet an essential part of the picture seems to be the almost complete success which their story heroes meet in their quests. "V" heroes are seen as winners in the world--successful, ambitious, admired individuals (Ss #3, 64, 88, 93, 106, 107, 118, 122, 154). And although they face problems from an impersonal world, like being drafted (S#107), contending with the inertia of societal institutions (S#40), or meeting the cold world of college (S#106), the outcome is almost uniformly happy. Stories of the "V" group tell of the triumph, through diligence and work, of the self-reliant individual. These happy endings, coming after complex problem situations have been constructed, lend a simplistic and almost smug quality to many "V" stories. The "V" hero has few doubts as to the intrinsic value of his goal or his ability to attain it, and indeed events work out to justify his faith.

One may wonder if there are characteristics of the "V" type which

lead to his devising a uniformly successful outcome in his stories. Do such outcomes reflect a group trait of hope and confidence? Do they indicate an extremely high need for achievement? Further, might these endings reflect a defensive denial of the fact that diligence is not always a guarantor of the success of an endeavor? All of these possibilities are plausible in the light of what has been theorized concerning the "V" type. To settle this issue, however, further research would have to be undertaken to elucidate the "Values" personality more clearly.

Just as "V" stories are marked by a certain type of hero, so are "SR" stories distinguished by their own particular hero, the professional person or social role designatee. Whether it be an athlete (Ss #9, 68, 71), a physician (S#17), a would-be psychologist (S#52), an aspiring politician (S#133), or a "high-ranking professor" (S#109), these stories tell of aspirations centered around firmly established social roles. Like "V" heroes, "SR" heroes are admired and successful, with the writer's attitude at times approaching hero-worship (Ss #9, 17, 71, 109, 144). However, unlike "V" heroes who are admired for something they have learned or done, "SR" heroes are more often admired for what they are, i.e. what role they hold.

The stories written by "SR" subjects also share a common theme of the necessity of having good interpersonal relationships. Stories relevant to this point are the following: S#43, which tells of an "average" girl's comfortable emulation of her parents' respectable, middle-class life

style; S#109 and S#144, which deal with the value of good student-teacher relationships; S#52, the story of a would-be "helping professional" whose problems and aspirations revolve around interpersonal relationships; S#193, a girl's unhappy separation from her parents; S#162 and S#172, stories of girls experiencing problems involving their relationships with other girls; S#17, in which a physician works so hard for others that he has no time for himself; and S#9 and S#68, stories of socially popular athletes. Whether the heroes of these "SR" stories are being admired for their popularity and concern for others, or criticized and pitied for their inability to attain interpersonal harmony, the framework in which the stories are written remains the same: one must live and work with others in an established structure of relationships, and harmony in this structure is a prerequisite for happiness. Aspiration levels for "SR" heroes are high, but unlike their "V" counterparts, these heroes see as necessary the help and goodwill of others if they are to accomplish their goals. Indeed, this help and goodwill are seen as a goodly part of the reward for individual accomplishment, as important as the achievement itself.

It has been noted that heroes of "BA" stories are quite unlike their "SR" and "V" counterparts. They are most often unhappy--due to their own ambition (S#34), the pressures by society to conform (S#70), a feeling of differentness and estrangement from others (Ss #38, 70, 113, 123), or a feeling of lack of identity (Ss #41, 70). "BA" heroes are often bitter

toward society, and disgusted with its glorification of superficial amiability (Ss #38, 123), conventionality, athletics, and good looks (Ss #147, 195). Seemingly unable to derive satisfaction either from the life styles already provided by society, or from his own efforts at creating a life style, the "BA" story hero rails against the absurdity and crassness of life as he sees it. Often in a bitterly ironic or tragicomic fashion (Ss #38, 113, 147, 195), the "BA" writer attacks self and society in global terms--life is absurd (S#113), the only choice for a man is jail or insanity (S#70), and one has no choice but to dissemble with other people (Ss #38, 123).

Unlike "SR" and "V" heroes, "BA" heroes do not set high goals for themselves; nor are they successes in the eyes of the world. In the rare instances where the "BA" writer does tell of a successful person (Ss #147, 44, 195), it is to mock that person as being a sort of fool, a one-dimensional stereotype who "lacks a soul." "BA" heroes are anti-heroes--knife-collecting punks (S#187), dissemblers who fake sociability while hating other people (Ss #38, 123), and impotent, wandering minstrels (Ss #86, 113). If there is satisfaction to be derived in life, according to the "BA" stories, it is through such accomplishments as the contemplation and control of the body (Ss #44, 66), the understanding of one's own experience (S#34), or the development of a detached humor toward life (Ss #38, 86, 113, 147, 195). All of these possibilities share a common feature: they require no aid from others and submit to no standard of evaluation by others.

Turning to another issue raised by the subjects' stories, what can be made of the disparity between subjects' affective reactions to words and their frequency of usage of those same words in a creative writing context? The disparity is the following: the self-mode groups are differentiable on the basis of their Semantic Differential responses to words, but not by their frequency of usage of those words. Indeed, each self-mode group used each of the stimulus words (with two exceptions out of 45 instances) about as frequently as either of the other two groups. In seeking an explanation for the disparity between affective reaction to words and word usage, I examined the stories themselves. This revealed that at least one reason for the similarity of groups' word usage may be the conventionality of phrasing used by almost all subjects in their stories. For example, let us take the stimulus word "painful." When used in the stories, this word appeared frequently as part of the phrase "painful experience." As another illustration, the stimulus word "sociable" was used most frequently as part of a story-opening line of the following type: "X was (or was not) a sociable person." Thus, the extent of usage of a given stimulus word in the stories seems to have been a function of the word's utility--how easily it could be worked into a variety of contexts. This, in turn, depended partly on the breadth of meaning of each word. Thus, the stimulus word "hope," the most frequently used stimulus word, can be used in many phrases, and in the context of almost any story, while "tingle," the least frequently used word, is limited to appearances

in stories dealing with physical sensation or excitement.

I am suggesting that the high verbal abilities and relatively homogeneous backgrounds of all subjects, together with limitations imposed by words' meanings on the range of contexts in which they are appropriate, may have combined to result in a widely similar use of language by subjects in all self-mode groups. While story-writing is thus conventionalized, affective reactions to words may be less so. Unlike story-writing, there are no canons of conventionality such as correct grammar, appropriate word usage, and clarity of ideas to lead to similarity in different subjects' emotional reactions to words. Thus, the individual subject's self-mode might well affect performance on the word reaction task before doing so in word usage, where limiting conventions lead to conformity of results.

Part of the purpose of this research has been to "flesh out" the abstract definitions of the three self-mode types. Let us look at these three types in the light of the empirical data which have been gleaned from this study.

The "V" group wrote stories of achievement-oriented, individualistic people who, for the most part, were both successful and happy. These stories tend to have a complacent quality, with little expressed anxiety. Also, considering figure-drawing formal characteristics, the V scores of subjects tended to correlate with these three measures in a direction suggesting high self-esteem for high V scorers. This finding is,

however, quite tentative at present. Only one of the three correlations, that between V score and figure centeredness, was statistically significant (at the $p < .05$ level). Thus, the story themes, and to some extent the figure-drawing formal characteristics, suggest that the subject scoring high on the V scale is a person of relatively high self-esteem, with an ordered, optimistic, and achievement-oriented view of life. The finding that thoughtful, pensive-appearing figures are drawn significantly more frequently by the "V" group is not surprising, considering the high goals and individualistic need for achievement spoken of by "V" subjects in their stories.

The "SR" type emerges as being more intimately concerned with other people than either the "V" or "BA" subjects. His high aspirations channeled in a professional or occupational direction, as opposed to the less role-oriented quest of the typical "V" type, the "SR" individual sees his success as dependent on working harmoniously with others. Indeed, from the stories written by "SR" subjects one has the impression that harmonious social relationships are of the same order of importance to him as is the actual success of his endeavor, whether it be entering a profession or attaining another concrete goal. This is consistent with the theoretical model of the "SR" type--one whose self is grounded in the experiential continuities of social role.

The finding of frequent uniformed or costumed characters in "SR" figure drawings may well illustrate this type's tendency to identify with

social groups and to perceive others in terms of their social group memberships.

A final note about the "SR" type refers to the high frequency of usage of the stimulus word "trustworthy" in "SR" stories. Although this finding may be due to chance, yet it is possibly of some significance. Perhaps the "SR" use of "trustworthy" can be understood as reflecting a genuine concern about the issue of trust. In a sense, trust is the bond which renders other people's behavior predictable, and the social system stable. Both from theoretical considerations and our empirical data, the "SR" type seemingly wants and needs an orderly social structure in which to function. For this structure to remain intact, people must be trustworthy and hold to their proper role behaviors. Thus, the "SR" subject's constant concern would be that others may not, in fact, be trustworthy. If this were so, i.e. if indeed others could not be trusted to play consistent social roles, then the "SR" subject would experience difficulty in finding consistent roles for himself. This, in turn, would be a serious disruption in the "SR" subject's sense of self.

The abstract "BA" type is similarly given empirical referents by subjects' performances on word reaction, story-writing, and figure-drawing. Data from these three sources, however, do not add up to such relatively clear pictures as do data for the "V" and "SR" types. Results of the Semantic Differential task show the "BA" group to be especially reactive to words related to bodily functioning, as was expected. Story

themes of this group, however, dealt principally not with issues related to bodily functioning. Instead, the salient features of "BA" stories were themes of loneliness, bitterness, and disgust, usually centered around the problem of the individual's uneasy relationship to the rest of society. These aspects seem, on the surface at least, to bear little relation to bodily functioning. Thus, while story themes of the various "BA" subjects do bear similarity to each other, their relationship to the theoretical nature of "Bodily Awareness" types demands clarification. A third piece of empirical data on the "BA" group is the frequent "Joe College" appearance of their human figure drawings. One does not find what might naively be expected in these drawings, perhaps an emphasis on nudity or another example of obvious concern for bodily function, but data which support the hypothesis of greater focus upon aspects of the body in a very general way.

How then might the various findings regarding the "BA" type be put together? Doing this requires speculation which seems justified if one is to develop adequate hypotheses about "BA" types. The two most solid pieces of data on which to begin are "BA" affective reactions to words and "BA" story themes. The former data establish, as do these subjects' questionnaire responses, that the "BA" type is responsive to at least some experiential continuities of bodily functioning. These subjects seem to care greatly about their physical states. Their story themes, however, speak of a concern for not fitting into society, a feeling of estrangement and loneliness.

How might the "Joe College" appearance of the "BA" figure drawings fit? On the surface, it is somewhat surprising that subjects' writing of estrangement and loneliness should draw pictures of fraternity men, sorority girls, and other stereotypically "adjusted" types. Conceivably, these drawings reflect the "BA's" need to maintain a facade in order to get along in the world. Perhaps the depiction of "Joe College" illustrates a longing to be a satisfied, integrated group member. Or further, it may be a sign of contempt and ridicule. Finally, the aspect of bodily adornment represented by fraternity T-shirts, etc., should not be overlooked when seeking the "BA" motivation for drawing "Joe College."

At this point, I cannot depict with assurance the "BA" type as he emerges from this research. I can, however, point to several features which do seem to characterize the "BA" subject in these studies. First, he is concerned with his body, as was expected. Second, he seems more overtly anxious and unhappy than other types, qualities not predicted from theoretical considerations. And, third, his anxiety would seem to stem at least partly from a feeling of not being integrated into the world around him, of not being able to find a place in life. Of course, one must consider the possibility that these characteristics may apply only to the "BA" types found in my sample of college undergraduates.

Finally, let us turn to the issue of various levels of awareness. Throughout the literature on the self, there exists an almost constant confusion between the conscious and the unconscious self. Is an individual's

self expressed more importantly in what he says he is, or thinks he is, or is it something hidden from his own awareness? The phrase "experiential bases of the sense of self" implies (a) that there is a conscious sense of self, based on continuities in experience, but that (b) these important experiential continuities may or may not be present in awareness. Because of this equivocal relationship of self to awareness, the ideal test of an individual's necessary experiential continuities of self would be to disrupt those continuities and observe resultant effects on the sense of self. For example, the effect of disruption of certain nervous system feedback continuities would be a test of the relative importance of bodily awareness to the sense of self. The effect of removing an individual totally from his customary social role matrix would be a test of the contribution of role continuities. The disruption of one's values, perhaps through placing him in a situation where his values are disconfirmed or denigrated, would test the salience of values continuities. Since these procedures of disruption are likely to be indefensible from an ethical point of view, the preliminary method of self-report must be seen as a partial answer to the problem of the experiential continuities of self. Tapping principally those aspects of self experiences which are available to awareness, the self-report method has admitted limitations in reaching deeper levels of consciousness.

When compared to the disruption-of-continuities method, the self-report is more geared to tapping conscious aspects of the experiential

bases of the sense of self. However, within the four self-reports used here--the questionnaire, Semantic Differential, creative story, and human figure drawing--there are, at least in theory, differences in the levels of consciousness tapped. Therefore, I hope that unconscious processes have not been totally neglected by my use of the self-report method.

In this research I have sought to provide a method for assessing the tripartite sense of self, and also to demonstrate some concrete behavioral differences among the self-mode types. To the extent that these goals have been accomplished, one can use the information that has been accumulated in this study to investigate the nature and dynamic importance of the sense of self of an individual. In doing this, one could learn a great deal more about an individual subject's sense of self by regarding the questionnaire, figure drawing, creative story, and Semantic Differential in the light of one another.

The method of studying each subject's four self-reports in an integrated configuration contrasts with that used in the present study, where a given subject's four self-reports were considered independently of each other. This separation into parts of each subject's performance might be criticized as being (1) wasteful of information, in that the four parts together form a more meaningful organic whole, and (2) unjustified, in that since the four parts were done at relatively the same time, they are not independent of each other. This latter criticism could especially be applied to the story and drawing; here the subject was told to write a

story about the figure he had just drawn.

In response to these criticisms, let us first look at why I considered the four self-reports independently of each other. In an attempt to demonstrate the breadth of effects of the tripartite sense of self, I needed to show the existence of concrete behavioral differences among the self-mode groups on diverse tasks. To show such differences in the figure drawing, say, and in the stories, the investigator must not allow his knowledge of a given subject's figure drawing to influence his interpretation of the story. To do so would certainly introduce heavy experimenter bias. It would also nullify the chance of finding the very things we set out to look for--independent differences among the groups in story writing and figure drawing.

As for the criticism that figure and story are not completely independent of each other, indeed they probably are not. In fact, I assume such dependence when considering the figure drawing as a stimulator of fantasies for the story production. However dependent these two tasks may be in time, however, the diversity of the two activities--verbal expression and graphomotor production--would seem to insure that separate consideration of figure drawing and story is warranted. Also, each subject, being unaware of the self-mode categorization used to assess him, could not know how to fake consistency from story to drawing, should he for any reason wish to do so.

At this point, let us reaffirm that, having demonstrated empirical

referents for the theoretical construct by considering a subject's four self-reports independently of each other, it would now prove informative if for a given subject one were to consider his self-reports as an organic whole. To do so would hopefully give greater insight into the precise nature of the sense of self, and its interrelations with other facets of personality.

What has this study shown about the self, and how does the usage of this term in the present study relate to its usage in previous work? In the literature, the "self" has referred to basically two facets of personality. As a dynamic force, "self" has often been used to denote a prime source of human motivation, an energizer and director of important behavior. In this sense, as used by Horney, Rogers, and others, the "self" is a kind of "vital force." However, having said this, the writers using the term in this way fail to specify the behaviors which the self motivates and the processes by which it does so. The self as dynamic force has thus been portrayed as extremely potent by the aforementioned and other authors, but how it achieves and exerts this potency has been left unclear. In considering the self as a dynamic force, one most often derives from the literature the sweeping but circular conclusion that the self determines behavior so as to actualize itself (Rogers) or make itself adequate (Snygg and Combs).

In its other principal usage, "self" has been seen as a relatively static entity of personality. As an entity, one's self has been viewed as

a formation created by the individual to ward off anxiety, usually out of reaction to parental influences. Here, the self is seen as like a persona or self-system; namely, it is not a motivator, but rather a product of the anxiety motive. Seeing the self in this way results in viewing it as an endpoint, because it is the creation of anxiety and its resolution.

If the "self" as dynamic force has often appeared mystical and too all-encompassing, and the "self" as static entity has not served to explain the motivation of behavior, how do these conceptual problems relate to my usage of the term? I have attempted throughout this work to remain faithful to the principle that the self, whatever else it is, is experienced. One can assert with confidence that he feels a unity and continuity running through his experiences--that he is a self. In this sense, "self" is used here as an entity, if it be understood that by entity I refer to that which is experienced as unified and continuous. Our concerns have been with this self as entity. Recall, however, that the major problem arising when one conceives of the self as an entity has been its lack of explanatory or predictive value for understanding behavior. How has this study met this basic problem?

First, it should be noted that, as distinct from its usage by others, "self" as used here is not viewed as being necessarily a product of anxiety. Nor is it a static entity. The self as conceived here is a vital focus for organizing and experiencing behavior. The particular ways (modes) in which one experiences his self are seen as having relatively broad

implications for how he will experience other people and the world itself. Thus, the experience of self is seen as a model for understanding much of an individual's other perceptions. Whatever aspects of external or internal reality one is attending to, he must always do so through the filters of his own senses and his own cognitive apparatus. One is therefore experiencing himself at all times in all places, no matter what else he is experiencing. Thus, to understand the experiential bases of the sense of self would be to understand part processes of the totality of an individual's experience. If we can find the systematic or characteristic ways in which these processes occur, i.e. the ways in which a person experiences himself, we should be able to understand much of the rest of his way of seeing things.

"Self" as used in this study is thus an experienced entity. The importance of this entity for understanding psychological processes is seen in its role as a concomitant experience influencing all other perceptions. Because of this pervasive quality of self, knowledge of how the self is experienced should be useful in providing insight into the totality of one's experiences.

Having thus used "self" in a manner making it amenable to further empirical study, what are the implications of this research? Future studies, I believe, would logically take two related directions. First, there should be a more intensive study of the self-types, using the information and instruments thus far established. Such studies would attempt

to further "flesh out" real-life behaviors of the types, and would necessarily enter into consideration of the complex developmental origins of the three modes of self-experience. One could hardly get a clear picture of, say, the "bodily awareness" type without inquiring into the dynamic processes which lead one into experiencing himself chiefly in this mode. Research along the lines of clarifying the pictures of self-mode types would seek to answer such questions as the following: (1) Do "SR" types strive more than other types to avoid anxiety in interpersonal situations? If so, are they successful in their attempts, and, generally, are they more adept at manipulating others to treat them in non-anxiety-provoking ways? (2) Are "BA" types characteristically more unhappy and anxious than their "SR" and "V" counterparts? Do "BA" types have a less structured way of analyzing social situations, and the world in general? Are they more narcissistic, more introverted than other individuals? (3) Are "V" types more self-assured, more inner-directed than the other two, as they appear to be? Is the smugness of their stories reflective of a persistent need for quick, perhaps even premature, closure?

On a more general level, do persons engage in specific occupations and activities which could be predicted on the basis of their self-modes?

A second research direction would attempt to identify specific behaviors predictable from knowledge of the self-mode. For example, does one perceive others in the same mode as he perceives himself? Will an individual selectively recall information about another person in terms

congruent with his self-mode? Will he be attracted to, and perhaps communicate more satisfactorily with, other individuals who share his primary self-mode?

In summary, the purpose of this research has been to provide an empirical demonstration of a theoretical construction, the tripartite sense of self. This has been accomplished through the development of an assessment device for measuring the sense of self, and the demonstration that certain response tendencies are predictable on the basis of that assessment. For measuring sense of self, a 46-item questionnaire was constructed. By virtue of their questionnaire responses, subjects were separated into three self-mode groups--"Bodily Awareness," "Social Role," and "Values"--or into a "Mixed Reference Group." Each of the first three self-mode groups was then found to display some unique patterns of response on tasks of human figure drawing, creative story writing, and affective reaction to words.

This study has demonstrated the viability of assessing a postulated tripartite sense of self. In accomplishing this, it has developed some empirical referents for the concept of discrete self-modes. Further, it has moved the concept of self from a philosophical to an empirical grounding. Now it would seem possible to move toward determining more specific behavioral consequences of variations in self-modes.

APPENDIX

SELF-MODE QUESTIONNAIRE

Circle your answers to the questions below. Try to select the one best answer, the one you feel most strongly about, when several answers seem appealing.

1. What is your attitude toward sleep?

A	B	C	D	E
It's necessary, but not particularly good or bad	Enjoy it very much	It's a waste of time; keeps me from getting things done	I often cannot fall asleep, and need more sleep	Another attitude

2. Are you generally a sociable person?

A	B	C	D	E
Very sociable				Quite unsociable

3. a. How would you characterize your attitude toward the issue of pollution and ecology problems?

A	B	C	D	E
Caused mostly by industry	Caused by average citizen's lack of concern	Inevitable with technological progress	Not really a major problem	Another attitude

b. To what extent are you concerned about this issue?

A	B	C	D	E
Very much				Very little

4. Are voice qualities such as accent, grammar, pitch, and diction important to leading a successful, happy life?

A	B	C	D	E
Not at all	Slightly	No opinion	Somewhat	Very important

5. About how many times a day do you experience hunger?

A	B	C	D	E
0-1	2	3	4	5 or more

6. What is your attitude regarding physical exercise, like walking, playing sports, and doing exercises?

A	B	C	D	E
Good for health, but I get little enjoyment from it and don't get much exercise	I need exercise regularly in order to feel really alive and healthy	I enjoy playing team sports or exercising with others, but rarely do it alone	I like to play competitive sports, but am bored by simple exercising	I get regular exercise for health or other reasons but don't enjoy it much

7. In a discussion, how strongly do you usually support an opinion of yours which is not very popular?

A	B	C	D	E
Very strongly	I usually keep my opinions to myself	I may appear to agree, but usually my real opinion does not change	I often find myself being persuaded to the other's point of view	I rarely find myself in such a position

8. Which of the following reasons do you believe would be most likely to discourage you from marrying someone of another race?

A	B	C	D	E
Rejection by my family and/or friends	I am not physically attracted to most members of other races	Pride in my own race	I have too few attitudes and values in common with most members of other races	Other reason(s)

9. Which effect of minor illness, say a cold, that forces you to stay in bed for a day or two, distresses you most?

A	B	C	D	E
I get lonely, having to stay in bed away from people	The physical feelings: cough, tiredness, aches, etc.	I feel weak and helpless	I can't do the things I should get done during the day	Spending a lot of money on drugs, vitamins, doctors, etc.

10. Which of the following is true about your hearing?

A	B	C	D	E
Many loud noises hurt my ears	I don't hear very well	My hearing is normal	I hear better with one ear than the other	I hear many things that most other people don't

11. Do you believe in the value of honesty?

A	B	C	D	E
It is always best to be honest	It is good to be honest when possible	Honesty is good when it helps you to get along with people	Honesty is good when it is used to help people	It is impossible to be honest

12. What is your usual first reaction to hearing of someone who is actively supporting an "idealistic" cause?

A	B	C	D	E
Wonder why he would do it	Identify with him	Want to know who else is supporting the cause	Admire him: want to know more about him	Usually hope he doesn't cause trouble

13. How well are you able to communicate to others what it is that you would like them to do?

A	B	C	D	E
Very well				Not well at all

14. What is your most outstandingly bad-looking physical feature? _____ To what extent does this feature bother you?

A	B	C	D	E
Not at all				Very much

15. To what extent are you concerned about American foreign policy?

A	B	C	D	E
Very much				Very little

16. How important is it to you to maintain close friendships over long periods of time?

A	B	C	D	E
Very important				Not at all important

17. Which of the following do you believe to be the most important function of government?

A	B	C	D	E
To provide education for the people	To defend the social order from internal and external dangers	To protect the lives and upgrade the health of the people	To keep peace and stability in the nation	To secure freedom and justice for the people

18. How good are you at making others feel comfortable in your presence?

A	B	C	D	E
Very good				Not good at all

19. a. Regarding headaches and other bodily aches and pains (teeth, muscles, joints, stomach, etc.), how would you describe yourself?

A	B	C	D	E
Infrequent headaches, infrequent body aches	Frequent headaches, frequent body aches	Frequent headaches, infrequent body aches	Infrequent headaches, frequent body aches	Very rarely experience either

b. How much attention do you usually pay to signs of stress in your body?

A	B	C	D	E
Quite a bit				None at all

20. How important is it to you to have good, stylish clothes?

A	B	C	D	E
Very important				Totally unimportant

21. How often have you felt deeply committed to a cause: (political, social, religious, or personal)?

A	B	C	D	E
Never	Once	Several times	Often	Always

22. How do you feel about your vision?

A	B	C	D	E
Very good				Quite distressed

23. Where would you place yourself on this spectrum?

A	B	C	D	E
Very masculine	More masculine than feminine	Many traits of both masculinity and femininity	More feminine than masculine	Very feminine

24. Do you believe in the "power of love"?

A	B	C	D	E
Yes, very strongly		Not sure		No, strongly

25. Do you believe that physical abnormalities are a detriment to leading a successful, happy life?

A	B	C	D	E
Often are	Can be an asset	Can be overcome	Inevitably	Not really a major problem

26. Do you believe in any form of a Supreme Being, a God?

A	B	C	D	E
Yes, strongly		Not sure		No, strongly

27. How "emotional" are you?

A	B	C	D	E
Very emotional				Very unemotional

28. Which of these goals would you say is most important to you?

A	B	C	D	E
Maintaining good health	Winning the respect and liking of others	Having a close, happy family	Achieving excellence in some field of endeavor	Achieving a gratifying sexual relationship

29. When you are with other people, are you usually aware of your height relative to theirs?

A	B	C	D	E
Very aware				Not aware at all

30. How much do you enjoy working with other people, as on a committee?

A	B	C	D	E
Dislike it very much				Enjoy it very much

31. How important is it to you to maintain a good relationship with your parents (if they are still alive)?

A	B	C	D	E
Very important				Not important

32. Which of the following best describes your attitude toward sex?

A	B	C	D	E
It should be a symbol of love	It's enjoyable; makes me feel good	There's a time and place for it	It's rather dirty and disgusting	It causes many problems and much unhappiness

33. How much do you think about your state of health?

A	B	C	D	E
Quite a bit				Not at all

34. How much do you care about your looks?

A	B	C	D	E
Very much				Hardly at all

35. Do you feel you are a likeable person?

A	B	C	D	E
Very likeable				Not at all likeable

36. How would you characterize your religious views?

A	B	C	D	E
Strong	Weak	Non-existent	Skeptical	Searching for relevant values

37. How would you describe your own code of conduct regarding how to treat other people?

A	B	C	D	E
I have no such code	"Do unto others as you would have them do unto you"	Treat them like they treat you	Respect them, but be wary	Get them before they get you

38. Do you feel very energetic?

A	B	C	D	E
Very energetic				Lethargic

39. When assigned a reasonable task you do not like, what do you do?

A	B	C	D	E
Try to do it well	Try to get it over with	Try to avoid showing how much I dislike it	Refuse to do it	Try to turn it into something worthwhile

40. How much do you care about maintaining, or reaching, what you consider to be your ideal weight?

A	B	C	D	E
Very much				Not at all

41. When you wish to make a favorable impression on someone you like, which of the following things about yourself do you try to emphasize?

A	B	C	D	E
My attitudes and values	How friendly I am	My looks and warmth	My standing among my peers	My intelligence and sense of humor

42. About how many times a day do you experience thirst?

A	B	C	D	E
0-1	2	3	4	5 or more

43. What is the principal advantage in receiving a good education?

A	B	C	D	E
One learns how to get along with many different kinds of people	Prepares one for an occupation or profession	Liberates one's mind	Increases one's chances of being a success in life	Increases one's prestige and value in the eyes of others

44. Which of the following assets do you believe is the most important ingredient in making one person attractive to another?

A	B	C	D	E
Values and spiritual qualities	Looks	Friendliness	Interpersonal sensitivity	Sense of humor

45. Regarding your feelings of being too hot or too cold in various situations, which description fits you best?

A	B	C	D
Quite "thin-blooded"; often cold in many situations where others are not	Easily become uncomfortably warm even when most others are not	Generally comfortable, with little sensitivity to temperature	Often either too warm or too cold--very sensitive to temperature changes

46. When do you first notice that you are ill?

A	B	C	D
When other people bring to my attention that I don't look well, am coughing a lot, etc.	When I realize that for several days I haven't felt exactly fit	At the first signs of illness; I can tell immediately when something is wrong	When I cannot live up to my idea of what I should be able to do

REFERENCES

Allport, G. Becoming. New Haven: Yale University Press, 1955.

Anastasi, A. Psychological testing. London: Macmillan, 1968.

Angell, J. An introduction to psychology. New York: Henry Holt, 1920.

Angyal, A. Foundations for a science of personality. New York: The Commonwealth Fund, 1941.

Ansbacher, H., & Ansbacher, R. (Eds.) The individual psychology of Alfred Adler. New York: Harper and Row, 1956.

Bakan, D. The duality of human existence. Chicago: Rand McNally, 1966.

Baldwin, J. Social and ethical interpretations in mental development. New York: Macmillan, 1899.

Biddle, B., & Thomas, E. (Eds.) Role theory: Concepts and research. New York: Wiley, 1966.

Combs, A., & Soper, D. The self, its derivative terms, and research. Journal of Individual Psychology, 1957, 13, 134-144.

Cooley, C. Human nature and the social order. (Rev. ed.) New York: C. Scribner's Sons, 1922.

Erikson, E. The problem of ego identity. Journal of the American Psychoanalytic Association, 1956, 4.

Federn, P. Ego psychology and the psychoses. New York: Basic Books, 1952.

Fisher, S. Body awareness and selective memory for body vs. non-body references. Journal of Personality, 1964, 32, 138-144.

Fisher, S. Body sensation and perception of projective stimuli. Journal of Consulting Psychology, 1965, 29, 135-138.

Frankl, V. Man's search for meaning. Boston: Beacon Press, 1959.

Goffman, E. The presentation of self in everyday life. Garden City, N. Y.: Doubleday, 1959.

Heise, D. Semantic differential profiles for 1,000 most frequent English words. Psychological Monographs: General & Applied, 1965, 79, No. 601.

Hilgard, E. Human motives and the concept of the self. American Psychologist, 1949, 4, 374-382.

Horney, K. Neurosis and human growth. New York: Norton, 1950.

James, W. Principles of psychology. Vol. I. New York: Henry Holt, 1890.

Jung, C. Two essays on analytical psychology. Cleveland: World, 1953.

Kamano, D. An investigation on the meaning of human figure drawing. Journal of Clinical Psychology, 1960, 16, 429-430.

Kamano, D., & Drew, J. Selectivity in memory of personally significant material. Journal of General Psychology, 1961, 65, 25-32.

Kant, I. Critique of pure reason. New York: Macmillan, 1927.

Kay, B. A map for explorations in rolecentrism. Journal of Social Psychology, 1966, 70, 39-52.

Keniston, K. The uncommitted. New York: Dell, 1960.

Lakin, M. Certain formal characteristics of human figure drawings by institutionalized aged and by normal children. Journal of Consulting Psychology, 1956, 20, 471-474.

Lakin, M. Formal characteristics of human figure drawings by institutionalized and noninstitutionalized aged. Journal of Gerontology, 1960, 15, 76-78.

Lecky, P. Self-consistency. New York: Island Press, 1945.

Lifton, R. "Thought reform" of western civilians in Chinese Communist prisons. Psychiatry, 1956, 19, 173-195.

Linton, R. The study of man. New York: Appleton-Century, 1936.

Lubin, B. Some effects of set and stimulus properties on TAT stories. Journal of Projective Techniques, 1960, 24, 11-16.

Luby, E., Gottlieb, J., Cohen, B., Rosenbaum, G., & Domino, E. Model psychoses and schizophrenia. American Journal of Psychiatry, 1962, 119, 61-67.

Machover, K. Personality projection in the drawing of the human figure. Springfield, Ill.: Charles C. Thomas, 1948.

Maslow, A. Critique of self-actualization. Journal of Individual Psychology, 1959, 15, 24-33.

Maslow, A. A theory of meta-motivation: The biological rooting of the value life. Humanitas, 1969, 4, 301-344.

McDougall, W. An introduction to social psychology. London: Methuen, 1908.

Meerloo, J. Brainwashing and menticide. Psychoanalysis and the Psychoanalytic Review, 1958, 45, 83-99.

Miller, D. The study of social relationships: Situation, identity, and social interaction. In S. Koch (Ed.), Psychology: A study of a science. Vol. 5. New York: McGraw-Hill, 1963.

Mitsos, S. Personal constructs and the semantic differential. Journal of Abnormal and Social Psychology, 1961, 62, 433-434.

Murray, H. Uses of the Thematic Apperception Test. American Journal of Psychiatry, 1951, 107, 577-581.

Murstein, B. Assumptions, adaptation-level, and projective techniques. Perceptual and Motor Skills, 1961, 12, 107-125.

Rantz, J. The Meno of Plato. London: K. Paul, Trench, Trubner, & Co., 1938.

Reed, G., & Sedman, G. Personality and depersonalization under sensory deprivation conditions. Perceptual and Motor Skills, 1964, 18, 659-660.

Rogers, C., & Stevens, G. Person to person: The problem of being human. Lafayette, Calif.: Real People Press, 1967.

Ross, W. D. (Ed.) The student's Oxford Aristotle. London: Oxford Press, 1942.

Royce, J. Self-consciousness, social consciousness, and nature. Philosophical Review, 1895, 4, 465-485.

Sarbin, T. A preface to psychological analysis of the self. Psychological Review, 1952, 59, 11-21.

Schachter, S., & Singer, J. Cognitive, social, and physiological determinants of emotional state. Psychological Review, 1962, 69, 379-399.

Schein, E. The Chinese indoctrination program for prisoners of war. Psychiatry, 1956, 19, 149-172.

Schilder, P. The image and appearance of the human body. New York: International Universities Press, 1950.

Shands, H. Conservation of the self. Archives of General Psychiatry, 1963, 9, 311-323.

Skinner, B. Science and human behavior. New York: Macmillan, 1953.

Snider, J., & Osgood, C. Semantic differential technique. Chicago: Aldine, 1969.

Stace, W. The philosophy of Hegel. London: Macmillan, 1924.

Sullivan, H. The interpersonal theory of psychiatry. New York: Norton, 1953.

Tabachnick, N. Self-realization and social definition: Two aspects of identity formation. International Journal of Psychoanalysis, 1967, 48, 68.

Taylor, J., & Mangan, G. Perceptual learning and verbal meaning. Perceptual and Motor Skills, 1962, 14, 223-229.

Titchener, E. An outline of psychology. New York: Macmillan, 1898.

Van Krevelen, A. The relationship between recall and meaningfulness of motive-related words. Journal of General Psychology, 1961, 65, 229-233.

Watts, A. Psychotherapy east and west. New York: Ballantine Books, 1961.

Wheelis, A. The quest for identity. New York: Norton, 1958.

Wylie, R. The present status of self-theory. In E. F. Borgatta and W. W. Lambert (Eds.), Handbook of personality theory and research. Chicago: Rand McNally, 1968.

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